

## Tilburg University

### Beyond marriage

van Damme, M.C.D.

*Publication date:*  
2010

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication in Tilburg University Research Portal](#)

*Citation for published version (APA):*  
van Damme, M. C. D. (2010). *Beyond marriage: Women's economic independence and separation in comparative perspective*. Ridderprint.

#### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

#### Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

**Beyond Marriage.**  
**Women's Economic Independence and Separation**  
**in Comparative Perspective**



**Beyond Marriage.**  
**Women's Economic Independence and Separation**  
**in Comparative Perspective**

PROEFSCHRIFT

ter verkrijging van de graad van doctor aan de Universiteit van Tilburg,  
op gezag van de rector magnificus, Prof. dr. Ph. Eijlander,  
in het openbaar te verdedigen ten overstaan van  
een door het college voor promoties aangewezen commissie  
in de aula van de Universiteit op vrijdag 3 december 2010 om 10.15 uur

door  
Maïke Catharina Dimphena van Damme  
geboren op 25 december 1978  
te Sluis

Promotor: Prof. dr. Matthijs Kalmijn

Copromotor: dr. Wilfred Uunk

Copyright © Maike van Damme, 2010 / Tilburg University

ISBN 978-90-5335-339-4

Printed by Ridderprint

Cover design: Sibylle Bil en Ridderprint

The research in this book was financed by the Netherlands Organisation for Scientific Research (NWO grant 400 – 04 – 170)

## Voorwoord (Preface in Dutch)

Een sterke, economisch onafhankelijke vrouw, zoals op de voorkant van dit boek, dat is een beeld waarin veel gescheiden vrouwen zich kunnen herkennen. Maar er zijn ook veel vrouwen niet economisch zelfstandig, vóór noch na de scheiding. Wat zijn de gevolgen van economische afhankelijkheid tijdens het huwelijk? Hebben vrouwen die economisch zelfstandig zijn betere arbeidsmarktkansen na een scheiding? Zijn hierin verschillen tussen landen en waarom is dat zo? Op deze vragen geeft dit proefschrift antwoord.

Economische zelfstandigheid is belangrijk, evenals een fijne baan, zo heb ik ook zelf mogen ervaren de afgelopen tijd. Maar ook belangrijk is de support van collega's, vrienden en familie. Daarom wijd ik de rest van dit voorwoord aan de personen die op enige wijze hebben bijgedragen aan de voltooiing van dit boek. In de eerste plaats dank ik mijn promotoren Matthijs en Wilfred. Dank voor jullie altijd aanwezige hulp ondanks jullie drukke agenda's, maar ook voor de tijd en ruimte die jullie me gaven op een moment dat ik dat nodig had. Matthijs, je bent een onuitputtelijke bron van ideeën. Jouw scherpe inzichten, maar soms ook je pragmatisme waren een uitstekende aanvulling op mijn twijfel en perfectionisme. Wilfred, ik heb veel geleerd van je altijd kritische blik die ervoor zorgde dat ik mijn argumenten nog scherper op papier kon zetten. Ik werk in de toekomst nog graag met jullie samen! Furthermore, I would like to thank the members of the committee – Anne-Rigt Poortman, Hans-Jürgen Andreß, Haya Stier, and Paul de Graaf – for their valuable comments.

Daarnaast zijn er een aantal mensen en organisaties voor of tijdens dit promotie-traject voor mij van belang geweest: Wil Arts, met zijn aanstekelijke liefde voor sociologie; het SCP en in het bijzonder Jos de Haan, die mij, misschien onbewust, de weg terug naar de universitaire wereld wees; en Ferran Bach van vluchtelingenwerk, die me op een cruciaal moment een werkplek bood.

Naast mijn (toenmalige) AIO-collega's van het sociologiedepartement – Dorota, Ellen, Erik, Evelien, Heejung, Jornt, Kirsten, Marlous, Suzanne –, wil ik mijn kamergenoten Anna en Marjolein in het bijzonder bedanken. Anna, 'stella stalla', je bood een luisterend oor in alle *life events* die ik de afgelopen jaren heb meegemaakt. Marjolein, jij zorgde voor een boel gezelligheid gedurende de laatste fase van het schrijven. Zonder jullie als collega's was het schrijven van een proefschrift een stuk minder aangenaam geweest.

Maar het belangrijkste de afgelopen jaren waren mijn vrienden en familie. Ik mag mij gelukkig prijzen met zoveel lieve vrienden om me heen. Allereerst de 'sociomeiden' – Afra,

Evelyn, Mariëlle, Helmine –, binnenkort kunnen we ons tienjarig jubileum gaan vieren! Dat we nog maar vaak mogen vieren en pintelieren. *Homies* – Bas, Dolf, Kirsten, Loes, Luversa, Marie, Mirjam, Nathalie, Rianne, Robert, Rocio, Sora, Sander, Tijn, Tim, Willem – wat een ontzettend leuke tijd heb ik met jullie gehad het afgelopen jaar! Dat we nog maar veel leuke dingen mogen doen samen. Met de volgende mensen zorgden pintjes of roseetjes drinken onder het genot van lekker eten, theater, een muziekje, of een film ergens ter wereld altijd voor een welkome afleiding van werk: Bas D., Bas G., Frederique, Jochem, Maarten, Marijke, Nienke, Paul, Patricia, Sandor, Sven, Thijs, Veerle: Dank! Pauline, ik zie ik zie wat jij niet ziet... dat we nog maar veel avonturen samen mogen beleven. Arnold, thanx for your gift of being at the wrong time at the right place ☺. Un fuerte abrazo. Mariëlle, onze privé-afspraken monden vaak uit in plezierige discussies over werk. Dat we nog maar veel mogen sparren en het feministische gehalte in het Nederlandse debat over de combi werk en privé mogen blijven voeden. Nathalie, wat is het fijn om altijd weer op jou te kunnen vertrouwen, zelfs al zien we elkaar maar weinig. Dimitris, you became from a colleague such a close friend! You were always there when I needed you. Many thanks also for the nice discussions we had and for proof-reading parts of my dissertation. Werner, Agnes en Harie, dank voor jullie onophoudelijke steun en liefde. Ook al zien we elkaar nu nauwelijks meer, jullie hebben altijd een plek in mijn hart. Rob en Edna, bedankt voor jullie hulp in de lessen des levens. Zoals Wassily Kandinsky (vrij vertaald) zei ‘Wat wij waarnemen is van geen belang, wat er werkelijk toe doet is wat wij voelen’.

Tot slot wil ik mijn vier paranimfen bedanken, jammer dat ik er twee moest kiezen. Ik ben blij dat ik zoveel met jullie kan delen. Neel, je enorme enthousiasme en energie werken ontzettend aanstekelijk en je creatieve geest altijd zeer verruimend. Hellie, *life event caretaker*, jij stond samen met mij aan het begin van mijn sociologiecarrière en was er in alle levenslooptransities die ik sindsdien meemaakte. Kris, mijn rots in de branding, soms leek het wel ‘ik roep en jij draait’, hartverwarmend zoals jij voor mij klaarstond. Ilonka, wonkie, naast heel veel lol maken we samen ook nogal wat moeilijke periodes mee. Onze band wordt er alleen maar sterker van. Tot slot, papa en mama, dank voor jullie oneindige support. Geniet!

Maïke van Damme,  
Oktober, 2010

# Contents

<b>1. Introduction, Theoretical Framework, and Research Design</b>	<b>1</b>
1.1 Introduction	2
1.1.1 Why do we care about the economic consequences of separation for women?	3
1.1.2 The contribution of this study and research questions	7
1.2 Separated women's employment and alternative coping strategies: State of the art	9
1.3 Theoretical perspective: a multidisciplinary approach	14
1.3.1 What are the economic consequences of separation and how do women cope with them?	14
1.3.2 Individual-level explanations of employment consequences of separation	18
1.3.3 Country-level explanations of employment consequences of separation	23
1.4 Research design: type of data and method	28
1.4.1 Estimating micro-level influences on women's post-separation employment	28
1.4.2 Estimating macro-level influences on women's post-separation employment	29
1.4.3 Multi-level method	32
1.4.3 Data	33
1.5 Outline of the study	33
<b>2. Female-supportive Policies and Women's Employment after Separation</b>	<b>37</b>
2.1 Introduction	38
2.2 Theoretical background and hypotheses	39
2.2.1 Previous findings	39
2.2.2 The effect of separation on women's employment	40
2.2.3 A regime typology of family support	41
2.2.4 Hypotheses	46
2.3 Data and method	48
2.3.1 Data	48
2.3.2 Method	49
2.3.3 Dependent variables	51
2.3.4 Independent variables	51
2.4 Results	52
2.4.1 A description of employment changes	53
2.4.2 Multivariate analyses of employment changes	57
2.5 Conclusions and discussion	62



<b>3. The Employment of Separated Women in Europe: Individual and Institutional Determinants</b>	<b>65</b>
3.1 Introduction	66
3.2 Theoretical background and hypotheses	67
3.2.1 Separation effect	68
3.2.2 Financial incentives	68
3.2.3 Alternative coping strategies	69
3.2.4 Resources and restrictions	69
3.2.5 Institutions	70
3.3 Data and method	71
3.3.1 Data	71
3.3.2 Method	72
3.4 Operationalization	73
3.4.1 Dependent variables	73
3.4.2 Independent individual-level variables	74
3.4.3 Independent macro-level variables	75
3.5 Results	76
3.5.1 Institutional variation	76
3.5.2 Descriptive analyses	77
3.5.3 Multivariate analyses of employment entry	78
3.5.4 Multivariate analyses of changes in working hours	81
3.6 Conclusion and discussion	84
 <b>4. The Dynamic Relationships between Union Dissolution and Women's Employment: A Life History Analysis of 17 Countries</b>	 <b>87</b>
4.1 Introduction	88
4.2 Theory and hypotheses	89
4.2.1 The effect of women's employment on separation	90
4.2.2 The effect of separation on employment	92
4.2.3 The effect of women's employment during the union on post-separation employment	93
4.3 Methods	94
4.3.1 Data	94
4.3.2 Analytical approach and measures	95

4.4 Results	101
4.4.1 Descriptive analyses	101
4.4.2 The effect of women's work history on separation	105
4.4.3 The effect of separation on employment	110
4.4.4 The effect of women's work history on post-separation employment	112
4.5 Conclusion and discussion	118

## **5. Who Gains, Who Loses? Social Class and the Economic Consequences of Separation for British Women** **123**

5.1 Introduction	124
5.2 Theoretical considerations	127
5.2.1 Social class and women's economic dependence	127
5.2.2 Social class and women's economic position after separation	128
5.3 Data, method, and measures	131
5.3.1 Data	131
5.3.2 Method and measures	131
5.4 Results	134
5.4.1 Descriptives: Income changes due to separation	134
5.4.2 Descriptives: Income sources after separation	135
5.4.3 Union background and women's post-separation income sources	135
5.4.4 Union background and women's income changes after separation	138
5.4.5 Income sources and women's income changes after separation	142
5.5 Conclusion	143

## **6. Conclusion** **145**

6.1 Summary: Answers to the research questions	146
6.1.1 Women's post-separation employment and alternative income sources	146
6.1.2 The determinants of women's post-separation employment	148
6.1.3 The influence of institutions	152
6.1.4 This study's new findings in a nutshell	157
6.2 Theoretical implications	158
6.2.1 Implications for economic micro-theories	158
6.2.2 Implications for sociological micro-theories	159
6.2.3 Implications for demographic micro-theories	161
6.2.4 Implications for institutional macro-theories	162

6.3 Limitations and suggestions for future research	164
6.3.1 Limitations and suggestions concerning micro-theories	164
6.3.2 Limitations and suggestions concerning macro-theories	167
6.4 Policy implications	169
<b>Samenvatting (Summary in Dutch)</b>	<b>173</b>
<b>References</b>	<b>179</b>
<b>Appendix</b>	<b>188</b>

## **Chapter 1**

### **Introduction, Theoretical Framework, and Research Design**

## 1.1 Introduction

The economic consequences of divorce<sup>1</sup> and separation have been of growing concern to social scientists, policymakers, and the general public alike. Numerous studies have shown that women bear the lion's share of the economic costs of divorce as most women on average experience a substantial income decline while men have minor income losses. The bulk of these studies focused on divorce consequences for women's income, but so far research on other indicators of women's economic situation after divorce has been less frequently done. In particular, little attention has been paid to changes in women's employment due to divorce. This is surprising since employment is considered to be one of the most important strategies to cope with income loss after union dissolution (Bouman, 2004; Bradbury & Katz, 2002; Dewilde & Uunk, 2008; Duncan & Hoffman, 1985; Fokkema, 2001; Jansen, Mortelmans & Snoeckx, 2009; McKeever & Wolfinger, 2001). Besides, employment is an indication of women's economic independence and ability to be financially self-reliant in the long term. In this dissertation, I therefore focus on the impact of divorce and separation on women's employment. The studies that investigated separated women's employment were mainly descriptive and did not explain which women changed their employment and why. I add to this literature by explaining women's post-separation employment using a multidisciplinary approach, borrowing explanations from economic, sociological, demographic, and social policy theories. Although (single-country) studies found that women on average increase their employment due to separation, previous research also points to differences between countries. This dissertation therefore also compares the employment consequences of divorce between countries and relates cross-national differences to differences in institutional characteristics of countries. Institutions may either mitigate or constrain separated women's employment behaviour. The main question of this dissertation is: *"To what extent can we explain women's employment consequences of separation by economic, sociological, and demographic factors and to what extent can we explain country differences in these consequences by institutions?"* I define institutions broadly by referring to both formal institutional arrangements like social policies and informal ones which cover more 'hidden' rules in people's behaviour such as cultural norms (see 1.2.2 for further explanation).

---

<sup>1</sup> In this dissertation, I will mostly use the term 'separation' referring to both a legal divorce of a marriage and a separation of a marriage or a cohabiting union. As in the literature – and the older studies in particular – legal divorce has been studied more often, I will refer to 'divorce' mostly when discussing the previous literature. Terms such as union/partnership dissolution or union/partnership disruption refer to the same concept: separation of a marital or cohabiting union.

### *1.1.1 Why do we care about the economic consequences of separation for women?*

In Western societies divorce and separation have become more common over the years. Although the pace in the rise in divorce rates differs between countries, in most of them an increase can be observed in the seventies (see figure 1.1). Recently, the divorce rate seems to have been stabilized in most societies and divorce has become more and more accepted (Cherlin, 1992; Goode, 1993).

The increasing divorce rates have created much discussion among social scientists and policy makers. The societal debate (mainly driven by feminists) focused on the acceptance of divorce and women's gained independence; spouses do not have to stay in a bad marriage because of disapproving norms of their social environment or (foreseen) financial difficulties after union dissolution (Amato & Irving, 2006; Kitson, Babri & Roach, 1985; White, 1990). Getting a divorce may open up new perspectives for life and – especially for women – increase the feeling of autonomy and control (Amato, 2000). Scholars concentrated on the causes of divorce and answered questions such as: Who divorces? And, why do certain couples divorce and others do not? However, when divorce became established in more and more Western societies, both the societal and scientific debate shifted from the 'positive' aspects of getting a divorce towards the negative consequences of divorce (Goode, 1993; Kitson & Morgan, 1990). Divorce and separation influence individuals' economic, social, and psychological outcomes and this may have an impact on society. It is an event which may imbalance people and have consequences for people's functioning in society, at least in the short term (Kitson & Morgan, 1990). The major concern in this area has been on the effects of divorce for children's well-being and many studies have found that a parental divorce indeed may have negative consequences (Amato, 2000; McLanahan & Sandefur, 1994; Spruijt, 2007). It is therefore that policymakers have been particularly interested in divorce consequences. Recently, the consequences of divorce for men and women themselves have been investigated more and more often as well (e.g., Andreß & Hummelsheim, 2009; Poortman, 2002) – the US was an exception with many studies done already in the eighties –, although the focus in society remains on the impact for children.

Despite this growing body of literature on the divorce consequences and the fact that divorce has been proven to be especially detrimental for children, I believe the focus on women in this dissertation is useful and relevant for both scholars and policymakers. First of all, scholars unanimously agree that women bear a disproportionate cost of union dissolution

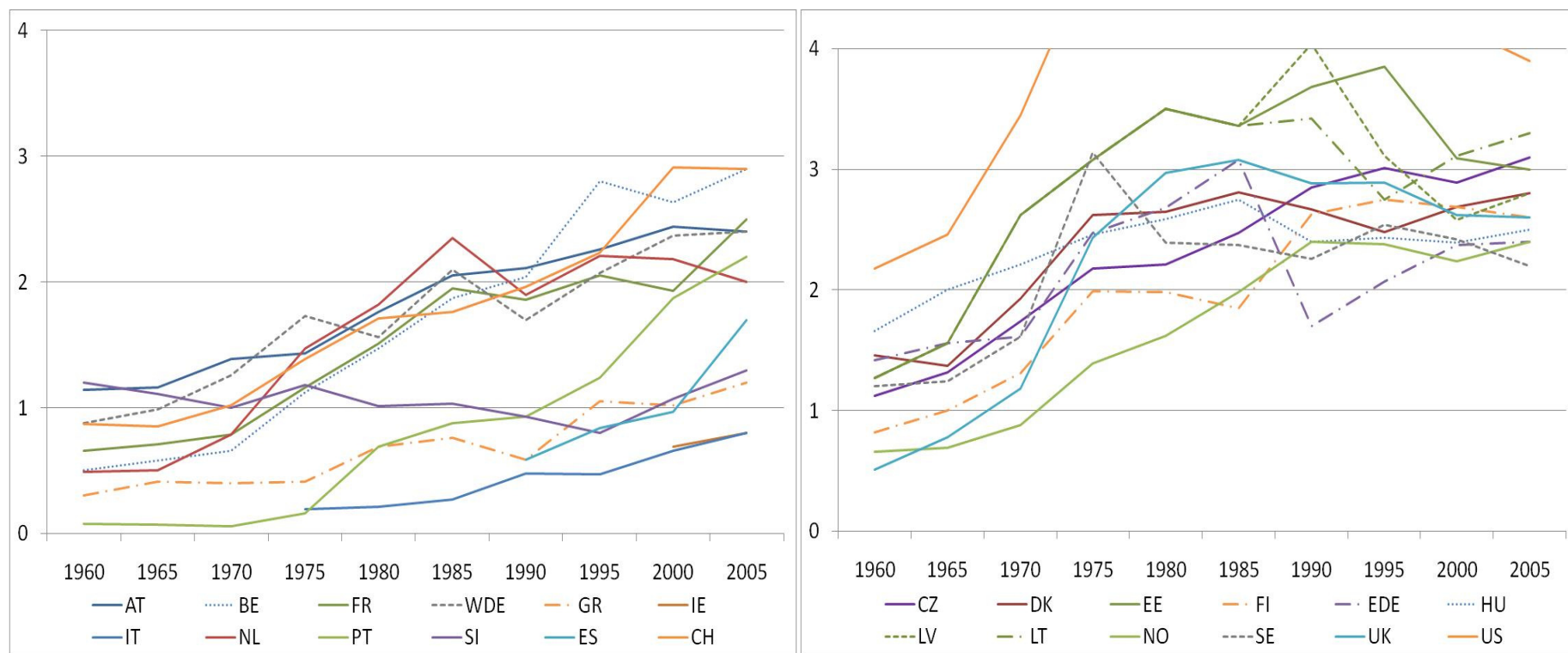


Figure 1.1

Crude divorce rate for 24 Western societies in the period 1960-2005

Notes: Figures of West-Germany (WDE) and East-Germany (EDE) refer to unified DE after 1990; Figures of SI refer to Yugoslavia before 1991. Figures of EE, LV, LT refer to USSR before 1991;

Source: Demographic Yearbook United Nations

While the financial impact of a divorce is modest for men, many women may experience a large income loss due to union dissolution (see 1.2 for a discussion of this literature).

Second, analysing what may determine women's post-separation economic situation may shed light on the things that need to be done to improve separated women's economic situation and together with that the well-being of their children. As women most often get the custody over their children after divorce, it is women's households in which the children grow up. Financial difficulties of single-mother families are a major factor explaining children's behavioural, psychological, and cognitive outcomes (Carlson & Corcoran, 2001; McLanahan & Sandefur, 1994). Low income – or a sudden drop in income – may not only affect children's behavioural problems, school achievement, and drop out rates, but can also result in a change of school or child care institution, a loss of friends, as well as in a larger geographical distance to the father since many women have to move to a cheaper house to cope with the income loss.

Third, divorce may increase gender inequality in a society as women are on average economically worse off after divorce than men. Despite the growing labour force participation of women in the last decades, many married women are still to some extent financially dependent upon their husbands. After union dissolution, the financial situation of women therefore decreases while the consequences for the financial situation of men are less negative because most of them earn their own income on the labour market. A woman's economic position after union dissolution thus depends on her economic position during the union. Some scholars – feminist sociologists in particular – would even argue that a woman's real position in the income distribution is hidden when she is married, and that her true position is revealed once she is divorced because then her standard of living depends only upon her own economic sources (Smock, Gupta & Manning, 1999). Examining the economic impact of partnership dissolution may thus show us the 'real' extent of economic gender inequality in a society. Put differently, marriage is an institute that equalizes gender earnings inequality in society and therefore the more marriages dissolve, the more unequal society becomes as women with on average lower incomes than men cannot rely on their husbands (with higher incomes) anymore. By studying the implications of divorce and separation, this study thus contributes to our knowledge on one of the core questions of sociology: that on a society's level of social inequality.

Moreover, the topic of this dissertation fits in the multidisciplinary tradition of life-course research, which emphasizes that important life events – such as marriage and



childbirth – are anchors that channel individuals through different life paths of economic well-being. Divorce is such an event, having a negative income effect for women, and it has contributed to the processes that made life courses less stable, less predictable, more individualized, and less standardized (Brückner & Mayer, 2005). Demographers and family sociologists observe more and more patterns of sequential monogamy instead of the conventional standardized family formation life course order of singleness, marriage, having children, empty nest, and death.

Finally, this study is particularly pertinent for social policy scholars. Decreasing gender inequality is an increasingly important goal of European policymakers and has been recently put higher on the EU agenda by the Swedish Presidency of the European Union in 2009 (Löfström, 2009). Also, divorce can be regarded as a ‘new’ social risk next to the ‘old’ risks of unemployment, sickness, and retirement. After the Second World War, Western European welfare states focused on protecting the incomes of male breadwinners and this was sufficient to keep most people (both men and women) out of poverty. The transition to a post-industrial society with changes in labour market and family structures such as the increase in women’s labour force participation and increasing job insecurity created new social risks among which the problem of combining work and family life and single parenthood are two important components (Bonoli, 2005; Taylor-Gooby, 2004). Next to having an underclass of the unemployed and those on welfare benefits, divorce creates an additional group of people – mainly women – who experience economic disadvantages and for whom special benefit schemes may be created (or adjusted if benefits are already there). Single mothers – and especially those with young children – are the most economically vulnerable group. For instance, 41 percent of lone parents had a low income in the Netherlands in 2005, whereas on average one tenth of the families has a low income (Sociaal en Cultureel Planbureau, 2007). For the majority of these families divorce was the reason of becoming a single mother (Centraal Bureau voor de Statistiek, 2009). The only group of women that was directly relieved by the old social risk welfare state when they were in economic need were widows (Van Poppel, 1992). In most Western countries income protection laws for widows and orphans were implemented halfway the 20<sup>th</sup> century. Apart from the fact that divorce was not very common in Western European societies at that time, divorcees were probably less pitied by society than widows because women who divorce were considered to be blamed for the divorce more often and their financial situation consequently. This dissertation may provide indications of how policy can alleviate the negative consequences of union dissolution for women since it compares the impact of

separation in different countries which have different social policies affecting women's post-separation situation.

### *1.1.2 The contribution of this study and research questions*

This study contributes to the existing research on the economic consequences of union dissolution in three ways. Firstly, a descriptive comparison of the employment consequences of divorce in European countries and the United States fills in a gap in the literature. Previous research focussed on the divorce impact on income, and less on other indicators such as employment. I examine short-term as well as long-term effects (in the divorce literature more than five years after separation is considered to be long-term), while so far most of the studies on the effect of divorce could only estimate effects shortly after union dissolution due to a lack of long-term longitudinal data with a sufficient number of divorcees. Additionally, as cohabitation occurs more and more often, I will investigate dissolutions of both marital and cohabiting unions. Studies on differences in the impact of dissolutions of consensual versus marital unions show mixed results depending on the country under study, which might be due to the difference in economic position of cohabiting and married women. For the US (Avellar & Smock, 2005) for instance, it is found that cohabiting women do worse after union dissolution compared to married women, whereas for the Netherlands (Manting & Bouman, 2006) the opposite was found.

The second contribution of this dissertation to the existing research on employment consequences of divorce has to do with the theoretical explanation. Most of the studies on women's employment changes after separation are descriptive in nature and few studies theoretically *explain* employment consequences. Moreover, the few studies that do provide explanations are dominated by an economic perspective, and that of Gary Becker's (1981; 1977) New Home Economics in particular. Sociological theories on employment consequences of divorce, however, are less well developed. Of course, it could be that economic theories already offer good predictions and that sociological theories are less needed. To what extent does the economic approach indeed satisfy in explaining the economic impact of separation? Or can the employment consequences of separation also be related to sociological or other characteristics of women? In this study, I examine explanations from multiple theoretical approaches. More specifically, I try to explain women's post-separation employment from economic, sociological, demographic, and social policy perspectives.

Thirdly, and most importantly, I add upon the literature by using a multi-level framework and relate the institutional context to women's divorce consequences. As mentioned earlier, many single country studies have investigated the economic impact of divorce, but large comparative cross-national studies are scarce. Exceptions are the studies of Uunk (2004), and Aasve et al. (2007), who looked at cross-national differences in income and poverty, respectively. Both also studied and found effects of institutions (and social policies in particular) on the impact of divorce. To what extent do social policies and other institutions influence women's post-separation *employment* as well? The advantage of using a multi-level framework – with individuals being one level and countries another one – is that composition effects can be taken into account. Much of the literature on social policy effects has related country differences in institutions to country differences in economic outcomes at the macro-level without being able to control for country differences in demographic and socio-economic variables at the individual level (Ebbinghaus, 2005). By studying effects of micro- and macro-level variables simultaneously, I am able to control the contextual effects of institutions for cross-national differences in a country's composition of demographic and socio-economic characteristics. A second advantage of analysing multiple levels is that cross-level interactions can be estimated. Institutions may moderate the effects of individual determinants; some explanations on the individual level may be more valid in certain societal contexts than in others.

To summarize, I will answer the following research questions:

1. *What are the employment consequences of separation for women?*
2. *To what extent can these employment consequences be explained by individual economic, sociological, and demographic characteristics of women and their spouses?*
3. *To what extent do country differences in these consequences exist and to what extent can institutions explain these country differences, as well as differences in the effects of individual-level determinants?*

## 1.2 Separated women's employment and alternative coping strategies: State of the art

Numerous studies have examined the economic consequences of union dissolution. Most of them are done in the US, but the last decade it has become a more popular topic to investigate in European societies as well. In this section, I briefly discuss the previous findings.

Previous research on women's economic consequence of divorce has mainly focussed on the impact of divorce on income. How large women's income drop due to separation is depends on the period and the country at study. Andreß et al. (2006) provided a short review of studies on the financial consequences of separation for European women and men in the nineties and the beginning of this decade and found that women's income changes due to separation varies from an average decrease of 80 percent to an increase of 7 percent, which is much stronger than the income drop for men which ranges between a drop of 23 percent to an increase of 6 percent. The authors argue that the heterogeneity in these findings may be due to cross-national variation in institutions, although they warn that the figures should be taken with caution because many of the studies are based on a small number of cases which may result in unstable estimates. Uunk's (2004) cross-country research confirmed this cross-national dispersion in income changes and showed that although European women on average experience a fall in median income of 24 percent, the decrease is largest in liberal welfare regimes (34 percent) and smallest in southern welfare regimes (7 percent). Hence, the general conclusion from this literature is that women on average experience an income drop, that this drop is much higher than the income drop for men, and that this income drop varies over societal contexts (Aassve et al., 2007; Andreß et al., 2006; Burkhauser et al., 1991; Dewilde, 2002; Uunk, 2004).

Research on other indicators of women's economic situation after separation has also been done, but the number of studies is not as large as that on the income consequences of divorce. Moreover, although there are a number of studies on the divorce impact on women's poverty risk (Aassve et al., 2007; Avellar & Smock, 2005; Dewilde, 2002; Duncan & Hoffman, 1985; Finnie, 1993; Jenkins, 2008; Vandecasteele, 2009), deprivation (Aassve et al., 2007), welfare dependency (Dewilde, 2002; Duncan & Hoffman, 1985; Gahler, Hong & Bernhardt, 2009; Jarvis & Jenkins, 1999; Jenkins, 2008; Weiss, 1984), and employment (Bouman, 2005; Bradbury & Katz, 2002; Corcoran, 1979; Duncan & Hoffman, 1985; Finnie, 1993; Gahler et al., 2009; Haurin, 1989; Jenkins, 2008; Johnson & Skinner, 1986; Mueller, 2005; Peterson, 1989), few of these studies thoroughly tested theoretical mechanisms

explaining the divorce impact on these outcomes and few of them are cross-nationally comparative. Also, most of these studies were done in the US, and replication with European data is scarce. As stated before, I focus on women's employment situation after separation since this is found to be a good strategy to improve women's financial situation and may provide women more economic independence in the long-term. Repartnering has also been found to cushion income loss to a large extent, but this does not contribute to women's economic independence and may be a less effective strategy to secure women's financial situation in the long run because second unions are more unstable (Cherlin, 1978).

Research findings on employment changes of separated women are not fully consistent and suggest country variation. As inferences of causal effects can be better assessed by longitudinal data (see discussion on research design later on), I limit myself to the discussion of longitudinal studies.

The dissertation of Sylvia Moore (1978) was the first study I found that estimated *individual* employment changes over time utilizing longitudinal data. Using the early versions of the National Longitudinal Surveys (NLS), Moore examined changes in annual working hours among young American women (non-working women included) around 1970 and found that whites increased their working hours with 60 percentage points in the year after divorce and blacks with 14 percentage points. Later on, Johnson and Skinner (1986) used the PSID to study changes in working hours among American divorced women between 1969 and 1977 and they also found a sharp rise in the two years after the marital separation. However, Johnson and Skinner also concluded that most of this increase was due to an increase in employment levels (68 percent of the women worked before divorce, while 88 percent did afterwards), and not of an increase in working hours among employed women. In the same period, Peterson (1989) analyzed both changes in employment rates and changes in working hours (for working women), using the NLS for mature women, and his findings confirmed the previous findings of employment increases due to divorce. Although later studies found increases in employment as well, these studies did not find such large increases in employment. Bradbury and Katz (2002) for example, showed that while 12 percent of the women who lost their husbands (both through death or divorce) started working in the US during the nineties, 10 percent stopped.<sup>2</sup> A study for Canada (Mueller, 2005) found no changes in women's average labour supply at all, while for the United Kingdom (Jarvis &

---

<sup>2</sup> This study is an example showing the mobility in women's employment around divorce. Most of the studies mentioned examined women's aggregate employment rates without paying attention to changes at the individual level, but some scholars studied individual mobility and they observed substantial movement into and out of the labour force due to divorce (e.g. Morgan, 1991).

Jenkins, 1999; Jenkins, 2008) even a decrease in women's employment after separation was found – on average more women exit the labour market in the year after separation than enter. Finally, Covizzi (2008) found that Swiss women have a higher risk to become unemployed when they separate.

The fact that most scholars do not find a large increase in women's employment levels after divorce and separation is initially surprising since a majority of separated women faces a substantial reduction in income and employment may be a way to reduce financial distress. The small increases in employment are even less impressive when we consider that most of the above described descriptive figures do not take into account the general trend of rising employment rates for all – both divorced and married – women. One reason why the effect of divorce on employment is not consistently strong and positive is that women might anticipate a union dissolution by increasing their employment before the divorce. The studies of both Johnson and Skinner (1986) and Peterson (1989) confirm this reasoning, but others did not find a substantial pre-divorce increase in employment (e.g., Finnie, 1993). Moreover, Poortman (2005) investigated anticipation differently by including the extent to which women expected their divorce. She examined several indicators of wives' work – women's labour force participation, number of working hours, part-time work, and full-time work –, but only for full-time work she found support for anticipatory behaviour, and even in this case the support was weak.

Another reason why union dissolution does not consistently increase women's employment is the issue of selection. Separated women may be a selective group of women – namely those who are more economically independent, self-reliant, and self-confident – who work more already before the separation. Hence, for this group of women a further increase in employment is unlikely because of ceiling effects. The issue of selection is often mentioned in studies examining the employment impact of divorce, but rarely analysed – an exception is the study of Johnson and Skinner (1986). They found that women indeed increase their employment a few years before the divorce, but they conclude that this is anticipatory behaviour instead of a selection effect.

Furthermore, women may have alternative income sources. Some women may receive welfare benefits or sufficient alimony<sup>3</sup> after the union has been dissolved and thus do not need to work. Others may remarry quickly or move in with their parents or other relatives which also reduces their need to work. Poortman and Fokkema (2001) for instance found for

---

<sup>3</sup> The term alimony refers to both alimony for the woman and child support for the child – though the majority of alimony payments concerns support for the child. I use the terms alimony and child support interchangeably.

the Netherlands in 1998 that 30 percent of divorced women were dependent upon social benefits, whereas only 10 percent of women who were in their first marriage were on welfare. They also observed that about one out of five divorced women received alimony payments. In other countries, figures on alimony receipt are higher – in the US up to one third and in Scandinavian countries about four out of five divorced women receive alimony, although the amounts in Scandinavian countries are comparatively low (Skinner, Bradshaw & Davidson, 2007). As for remarriage, scholars do not claim that women move in with a new partner only for economic reasons – obviously, love and social and emotional reasons are more important –, but it does provide financial benefits resulting in a lower economic necessity to work after separation (Dewilde & Uunk, 2008). Most studies find that about half of the separated women start living with a new partner within 10 years after separation (Bumpass, Sweet & Martin, 1990; De Graaf & Kalmijn, 2003; Lampard & Peggs, 1999). Living with relatives, on the contrary, occurs less frequently, is mostly a short-term solution to financial distress (Dewilde, 2009), and happens mainly in Southern and Eastern European countries (Kalmijn & Saraceno, 2008).

The above mentioned reasons may all vary across countries, explaining why studies of different countries come to different results. For instance, in some countries women have higher levels of economic independence – reflected in higher employment rates – which leads to a lower necessity for women to anticipate a divorce by increasing their employment already before separation. A similar argument may hold for country differences in selection effects. Countries with a higher rate of divorce are likely to have a less selective group of divorced women with respect to their employment levels and therefore the selection argument may be less valid in such countries. Lastly, the availability of and the eligibility to use certain income sources may vary across countries; there is cross-national variation in the institutional context. For example, government policies that provide income support for women may reduce women's economic need to work. An additional, not yet mentioned, explanation of country differences in employment changes due to union dissolution may be found in composition effects. Several individual-level characteristics of women may explain their employment behaviour after separation and countries may differ in the composition with respect to these characteristics.

I know of only three studies that examined in detail which (individual-level) factors explain employment changes due to separation. The study of Moore (1978) is the oldest one which gave an in-depth view of the determinants of labour supply changes around divorce. She found that having young children, poor health, and a low potential wage negatively affect

young American women's post-divorce working hours. Moreover, she also detected an effect of institutions: Women living in low-spending welfare states were more likely to increase their working hours than women living in high-spending welfare states. Johnson and Skinner (1986), secondly, found that the more work experience women have, the more they increase their working hours after marital separation. Peterson (1989), thirdly, tested to what extent the effects of human capital variables, the number of children, age of the woman, and gender role attitudes on employment were different for divorced women compared to married women. Although he found that in most cases the effects on employment changes did not significantly differ between those who were divorced and those who were married, all variables did influence women's employment after divorce. The last study on determinants of employment changes due to divorce concerns the Netherlands and was done by Poortman and Kalmijn (1999). They concluded that the higher the educational level, the fewer children there are in the household, and the older the children, the higher the probability that divorced women participate in the labour market. Women's age also had an effect and it was found to be curvilinear: Divorced women's labour force participation peaks at age 37. In sum, most of the above mentioned studies observed that human capital (work experience, educational level) increases women's employment after separation, whereas the number and age of the children in the household restricts it.

The conclusion of this literature review is that scholars did not find an unambiguous (large) positive effect of separation on women's employment. Not all women increase their employment after partnership dissolution, some do not change their employment behaviour and others even decrease their employment. Reasons for this may have to do with anticipation upon the divorce, selection issues, institutions providing alternative income sources for women after union dissolution, and individual characteristics of women. Furthermore, there may be country differences in the impact of separation on employment, as well as in the strength of the effects of individual-level factors. Which women change their employment due to separation? And to what extent can we expect to find country differences? In the following section, I describe different theoretical mechanisms which explain (1) the effect of separation on women's work and alternative income sources, (2) the effects of several individual-level characteristics on separated women's employment, and (3) the effects of country-level factors (focusing on the institutional context) on women's employment after separation.



### 1.3 Theoretical perspective: a multidisciplinary approach

#### 1.3.1 What are the economic consequences of separation and how do women cope with them?

Theoretically, it is expected that union dissolution generally has a negative effect on women's post-separation financial situation. First of all, there is a non-gender specific effect of property division. When splitting one household into two, one person has to find a new house, joint property has to be divided, and new household goods have to be bought. This has financial consequences for both spouses as for both the costs of living increase. The second explanation of a reduction in income due to separation for both men and women has to do with economies of scale. For both parties it is more expensive to run two separate households than one since housing, food, and other expenses can no longer be shared (see Kalmijn and Alessie (2008) for estimates of these effects).<sup>4</sup> The third explanation of an income fall due to separation is gender related and points to more disadvantages for women. On average, women will have invested less in the labour market and more in domestic tasks like housework and child rearing during the union. Especially women from traditional male-breadwinner households will lose more financially than men because of the loss of their husband's income. Fourthly, women may experience additional harm as they may experience wage discrimination on the labour market (Mandel & Semyonov, 2005). In sum, separation is expected to lead to income loss for both partners, but women are expected to suffer most.

How do women cope with such an income loss? A variety of income strategies may mitigate the fall in a woman's income: Here a distinction is made between self-earned income from employment and financial support from others: alimony from the ex-spouse, welfare benefits from the state, income from a new partner, and financial support from the family (both direct financial transfers and indirect financial support via co-residence). As for employment as a coping strategy, I expect that women on average will more often increase their employment after separation to cushion their income loss (*hypothesis 1*). By increasing their employment I refer to entry into the labour market for women who were not working before the separation and an increase in the number of working hours for women who were

---

<sup>4</sup> The following example shows this. When measuring the income of a household, scholars usually take into account the number of members in the household to correct for these economies of scale. The OECD-modified equivalence scale is the one most commonly used and assigns the first adult member in the household a value of 1, whereas the second adult member gets a value of 0.7. This means that a woman living in a two-adult household without children and both adults having an income of €100/week will theoretically have a personal income of €118 ( $€200/1.7$ ) – the same applies to her husband, while a single woman without children will have an income equal to €100. Hence, a dissolution of the household of two adult members leads to a decrease of 15 percent  $[(118-100)/118]$  in the theoretical personal incomes of both spouses.

working at the time of separation. Together with this expectation I also expect a lower likelihood of women reducing their working hours or leaving the labour market.

A second hypothesis has to do with income sources other than labour income. Having alternative income sources may reduce the economic need to work (more hours). The more alternative sources a woman has and the higher the income from these sources, the lower the work incentive. Alternative income support may come from various others and institutions play an important role here. Welfare benefits from the state and alimony payments by the ex-partner are two of the forms of institutional support mentioned most often, but also support from the family may help women (Smock, 1993) – especially in the short-term. Yet, moving in with a new partner seems to be most beneficial and it has been shown that remarriage restores women's incomes to pre-separation levels (Jansen et al., 2009).

How these income sources are related to women's post-separation employment is not clear-cut, however. For example, employment entry is difficult for many women dependent on welfare due to the 'welfare trap' – especially for those with low labour market potential. Women who leave welfare lose welfare-specific benefits like health care and housing subsidies which makes it difficult for them to make ends meet when they enter the labour market with a low-paid job; even when their income from work is higher than that from welfare, their income from work may be lower than their combined income from welfare and welfare-specific benefits (Harris, 1993). Welfare in this case, is thus an exclusive alternative to employment. Still, in some countries women on welfare are allowed to work part-time (European Commission, 1992-1997, 1998-2006), which may result in various income sources being stacked, a strategy often used by welfare-dependent women to make ends meet (Edin & Lein, 1997; Rainwater, Rein & Schwartz, 1986). In such a case, welfare and work are complementary and not mutually exclusive.

The same does not apply to financial support from the family, which may occur in two ways: Women may receive financial transfers or they may start living with their family in order to reduce housing costs and benefit from economies of scale. Although co-residence may also have the advantage of providing informal child care which facilitates combining work and care, I expect that both forms of family support on average reduce separated women's economic need to work.

As for financial support from a new partner, no consensus has been found in the literature. On the one hand, it may be argued that women who have a new partner have less economic need to increase their employment after separation (Dewilde & Uunk, 2008) and this implies a negative association between repartnering and women's post-separation

employment. Sociological theories on assortative mating, on the other hand, have emphasized that working women are more attractive partners and have more opportunities to meet new spouses than non-working women, which implies a positive association between repartnering and women's post-separation employment. Overall, I expect to find a negative influence of living together with a new partner on women's post-separation employment because the decision to quit working or reduce the number of working hours can more easily be made when a new partner brings in income, but the effect might be suppressed by the fact that working women more easily repartner than non-working women.

Financial support from the ex-partner, finally, may also either substitute or complement women's post-separation employment. In fact, many women prefer to combine alimony with a more stable income from labour as it may be an uncertain, temporary income source and the amounts are often not sufficient in practice to be able to earn a decent living (Del Boca, 1994). Although in principle child maintenance is paid until the child reaches the age of 18 in most countries, non-compliance rates are high and not all countries have guaranteed child maintenance schemes – and some of those who have such schemes limit the duration of payment to a number of years (Skinner et al., 2007). An alternative explanation of why alimony receipt is frequently combined with employment is that the group of alimony receivers is a selective group with characteristics – for instance women with strong self-determination and personal initiative – which make them more likely to work and work more hours than those not receiving alimony (Graham & Beller, 1989).

Note that the causal relation between alternative income sources and employment is unclear. Separated women may for instance live on welfare because they cannot find a job, or they might postpone finding a job once they start living on welfare. Whichever the case, when analysing women's employment situation after union dissolution, alternative income sources need to be taken into account. Acknowledging the ambiguous reciprocal relationships among the various income sources, I still expect that having an alternative income source on average decreases women's need to work (more hours) (*hypothesis 2*).

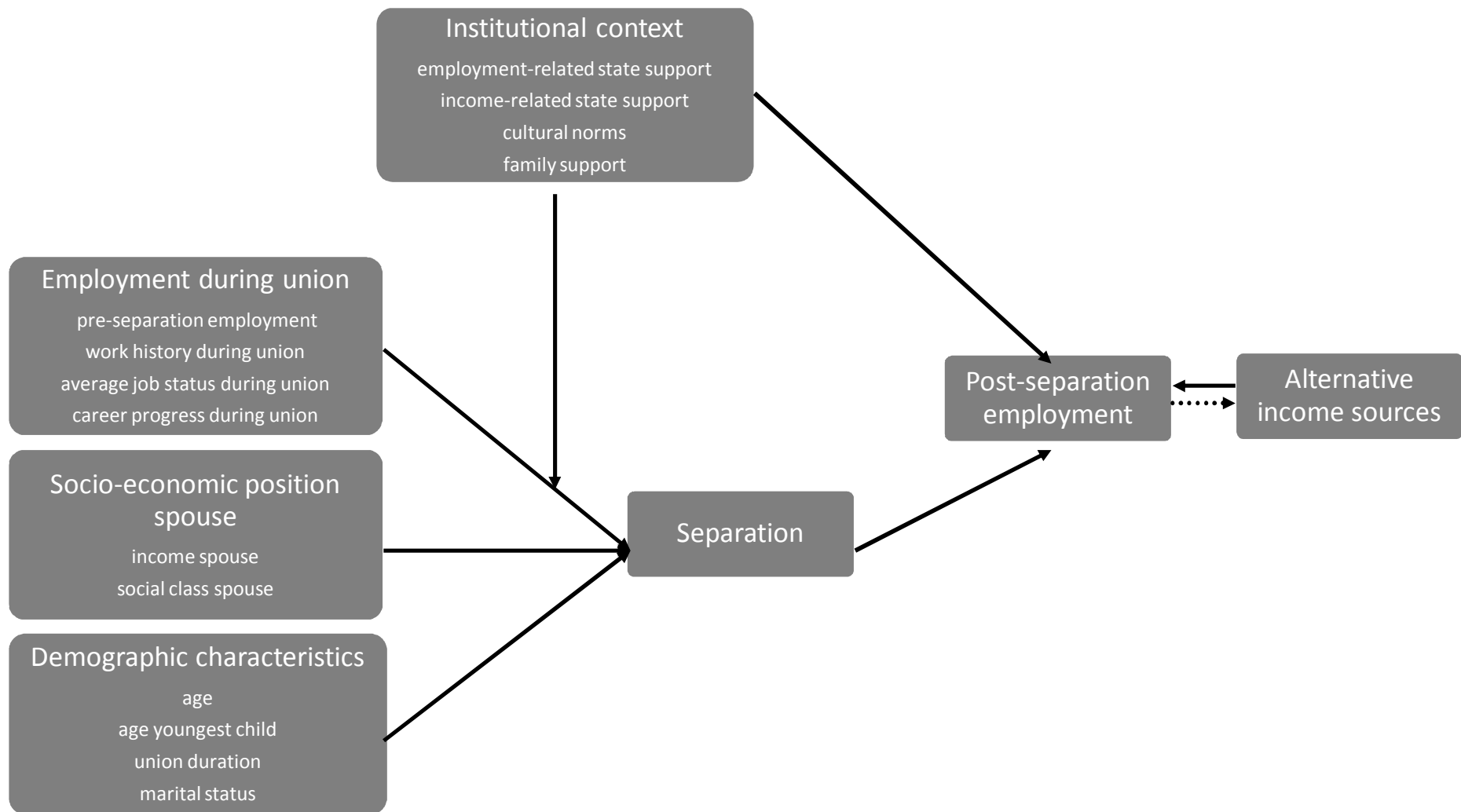


Figure 1.2

Theoretical model explaining women's post-separation employment situation

Why do some women adjust their employment and others don't? Why do some increase their working hours and others leave the labour market? Earlier I suggested that, apart from anticipation and selection issues, there may be important factors at two levels: The individual level and the country context level (see figure 1.2). On the individual level women's employment during the union, her spouse's socio-economic position, and her demographic characteristics affect women's employment after separation, next to women's alternative income sources. On the country level, formal and informal institutions play a role and they can have a direct effect and a moderator effect on women's post-separation employment. The moderating effect concerns a moderation of the effects of women's individual-level characteristics on women's employment after union dissolution. I will first discuss the individual-level explanations and then turn to the country level.

### *1.3.2 Individual-level explanations of employment consequences of separation*

Several economic and sociological theories may explain women's employment during marriage or cohabitation and consequently their employment after union disruption and all of them are based on the explanation of a traditional division of labour between the spouses. Such traditional task specialization within the household implies that men focus on performing paid work, while women stay at home and take care for the children. In such couples, women are economically dependent upon their husbands. The economic perspective of Gary Becker's (1981) New Home Economics – also known as the “specialization and trading model” – is the most well-known theory explaining traditional task specialization within the couple. Becker assumed that family members make rational decisions by wanting to maximize their utility or economic well-being (income) and they do this by specializing in the household tasks in which they are the most productive (compared to their partner). Given wage differences between men and women and given women's greater role in child rearing (Becker points to both biological and socialization differences between the genders), women are considered to be the most productive in doing domestic work, whereas men are assumed to be more productive in performing paid work. Both women (and men) are thus dependent upon their spouse. The more women specialized in domestic work and the less they invested in paid work, the fewer their economic resources outside the marriage will be. They do not only lose the economic resources of their spouses in case of a separation. Their investments in domestic work are also worth less outside the marriage than in it. Becker refers to these

kinds of investments as marital specific capital. For earning their own income on the market, women are thus more dependent upon their husbands than men upon their wives.

Scholars have raised some arguments against theories on the benefits of economic dependency within the household (e.g., Oppenheimer, 1997). The main arguments are twofold. First, specialization is a risky and inflexible family strategy, especially for the nuclear family because unforeseen events – like unemployment or disability of the main breadwinner, or illness of the care-taker – may lead to the temporary or permanent loss of a ‘specialist’ in the family. This can cause a large income decline or lead to a neglect of the children. Second, the concept of economic dependence is rather vague; it may refer to both absolute and relative dependence. The specialization theory focuses on relative dependency, meaning dependence upon one’s partner and implies that not only wives’, but also her partner’s working hours or income are important for the economic exit costs. This argument relies on assumptions that do not hold in reality, however. Economic resources are not always pooled and equally shared between spouses (Vogler & Pahl, 1993) and economic transfers between spouses do not always create a dependency relationship (Sørensen & McLanahan, 1987). What may matter more, therefore, is women’s absolute economic independence: To what extent are women able to earn a living independently as an individual (even though it would be at the minimum income level). In order to be able to disentangle women’s absolute and women’s relative economic dependence during the union, I take the spouse’s socio-economic position into account (see the next section).

Moreover, other theoretical approaches than the economic one may explain task specialization within the household, which implies that other mechanisms are at work explaining women’s post-separation employment from their work history during the union. Instead of (economic) utility considerations of the spouses, sociological mechanisms may be relevant, such as spouses’ relative bargaining power (Blood & Wolfe, 1960), functionality for society (Parsons, 1949), the couple’s aim to maintain their socio-economic status in society (Oppenheimer, 1977), or spouses’ gender role values (Hakim, 2000; Stafford, Backman & Dibona, 1977).

#### *Women’s employment during the union*

From Becker’s theory on married women’s economic dependence above, we can derive that women who specialized less in paid work during the union have higher economic costs to exit the marriage, and thus a worse employment position after separation. This is what I call the *underlying economic independence hypothesis* (the work effect on divorce is usually

referred to as the *economic independence hypothesis*). The underlying mechanism explaining this hypothesis can be derived from human capital theory: The less women worked during the union (the less economically independent they were), the more their human capital depreciates (Blossfeld & Huinink, 1991), and the lower their labour market prospects are. Derived from this argumentation, I expect that the more women worked during the union, the more likely they will increase their employment after a separation (*hypothesis 3*). Women's employment during the union can be specified by the working hours they worked just before the separation, the total number of working hours during the union, their job status, and the career progress they made.

#### *The influence of the ex-spouse's socio-economic position*

Reflecting a woman's *relative* economic dependence, the socio-economic situation of her spouse may influence her employment situation. Within the marriage, his economic position defines his economic advantage relative to hers according to Becker. But can his position also affect her employment situation after the union dissolved? We may expect it does. The effect of the socio-economic position of the spouse can be distinguished in two parts: Effects from his income situation, and effects from his social class.

First of all, women can experience a need to do paid work if they fall into poverty after divorce. Second, a relative decline in income can form an incentive as well. Women who were married to a man with a high income, will tend to lose more financially than women who were married to a man with a lower income. Given that people want to retain their standard of living – assuming that they compare their socio-economic position in society with a certain socio-economic reference group in which people have similar consumption patterns –, women from previously prosperous households will have a stronger financial incentive to increase employment than women from less prosperous households. For women who had a richer ex-husband the gap between their aspirations and the economic resources available to achieve these consumption aspirations increases and this puts economic pressures for them to work. If both mechanisms hold – a necessity to increase employment in order to escape poverty, and a necessity to increase employment in order to maintain a high standard of living –, I expect a U-shaped effect of ex-partner's income on women's post-separation employment: A high likelihood of increasing their employment for women who were married with a husband with a low income, a lower likelihood for women who were married to a husband with a medium income, and a high likelihood for women who were married to a husband with a high income (*hypothesis 4a*).

The ex-husband's social class is also expected to be related to women's post-separation work. On top of the income effect of women's ex-spouse – social class can be considered as a proxy for his permanent income –, women's economic dependence upon their spouses, their preferences to work, and their status position may matter. The social class of the husband may be an indication of her status position in society. During the union a woman's social standing is often derived from the social class of her family (mostly based upon the occupation of her spouse), whereas the type and quality of her job mattered less. However, after the union has been dissolved, a woman can derive her status only from her own occupation. A small, poor-quality job may then reflect a lower social position in society compared to the position she had when she was still in a union. For many women, becoming a housewife and reliance on other income sources than labour income may therefore be more attractive than to remain working because this provides them with more status.

Women's work commitment, gender role values, and attachment to economic independence are related to this. Service class wives may be more ambitious, have a higher work commitment, and have more egalitarian gender role attitudes than wives with a husband belonging to any of the other social classes. They may consider it more important to be economically independent during the union and will want to continue this economic independence after the separation by earning their own income and not relying on their ex-spouse or the state for income (which would probably provide them with a lower income anyway). Women with an ex-spouse from the working class, on the other hand, may be less likely to be employed after separation than service class women because they are more likely to have worked out of economic necessity than out of ambition and adherence to egalitarian gender role values. Besides that working for them often does not pay off and living on welfare might enable them better to make ends meet than belonging to the group of the working poor, women with an ex-spouse belonging to the working class may also find it less important to be economically independent after the separation. Since they mainly qualify for poor jobs, work does not provide them with intrinsic rewards and social standing. To them not work itself but providing their families with a higher income may matter more. Finally, I expect that those who had a spouse from the intermediate social classes will be the least likely to be working after separation because they may have been more likely to withdraw from the labour market during the union as soon as they could afford it. Being a housewife may have provided them with a higher social standing in society than having a (intermediate level) job and their work commitment may be lower than that of working class wives. I expect these women to be highly economically dependent upon their husbands during the



union and have few work experience which decreases their labour market chances after union dissolution. Compared to working class wives, they may be more likely to fall back on their ex-husbands as these husbands have more economic resources and are thus more likely to pay alimony.

In sum, I expect women with an ex-spouse from the service class to be the most likely to increase their employment, followed by those with a working class ex-spouse and lastly those with an ex-spouse belonging to the intermediate class (*hypothesis 4b*). Additionally, I expect that service class wives are the least likely to depend upon others for their income, whereas working class wives are the most likely to depend upon the state, and intermediate class wives are the most likely to depend upon their ex-spouse.

### *Demographic determinants*

Four demographic factors explaining women's post-separation employment are women's age at separation, marital status, the union duration, and the age of the youngest child. First of all, women's age may be a restriction to find a (good) job. The value of women's human capital decreases during life and age discrimination by employers may hinder non-working women to enter the labour market and working women to improve their employment position. Women in the beginning of their careers (and especially those without children) may be more likely to increase their employment after separation, however, since they may be more career oriented than women who are further in their careers. I therefore expect that the older women are when they separate, the more they will increase their employment, but this effect levels off and turns negative after a while (*hypothesis 5a*).

The effect of the age of the youngest child on women's post-separation employment can be explained in two ways. First, it may be considered an indicator of women's economic independence during the union as children may be the result of investment processes during the union in human capital versus marital-specific capital. This is thus a second test of the *underlying economic independence hypothesis*, next to the test on women's employment during the union. Because young children require more intensive caretaking than older children, women with young children at the time of separation will have invested more in marital-specific capital shortly before the separation compared to women with older children who might already have returned (part-time) to the labour market. In this sense, the effect of the age of the youngest child on separated women's employment would not differ from an effect on married women's employment.

Additionally, I expect a second, additional effect of the age of the children since younger children will constrain separated women's employment behaviour more than older children. This effect is expected to be more so for separated women than for women who have a partner, as partnered women can share child rearing with their partner thereby reducing the difficulties in combining work and care. To recap, I expect that the younger the youngest child in women's household, the less women will increase their employment after separation (*hypothesis 5b*).

The other two variables are also indirect indicators of women's economic independence during the union. Married women and women in longer lasting unions may have specialized more in domestic work than cohabiting women and those in unions of short duration (Brines & Joyner, 1999; Kalmijn, Loeve & Manting, 2007). Marriage indicates a stronger commitment between partners, making it less risky for women to specialize in unpaid household labour (Brines & Joyner, 1999). Marriage may also be considered a long-term life insurance; a contract that protects specializing women's economic situation (Becker) by increasing the probability to claim alimony after dissolution (Skinner et al., 2007). Married women may therefore be more likely to (anticipate to) receive alimony after divorce than cohabiting women. Hence, I expect that married women will increase their employment less after separation than cohabiting women (*hypothesis 5c*). Moreover, the longer the union lasts, the more time women may have spent on domestic work during the union and the more their human capital may have depreciated. I expect that the longer the union lasted, the less women increase their employment after separation (*hypothesis 5d*).

### 1.3.3 Country-level explanations of employment consequences of separation

Theories focusing only on micro-level explanations have been criticized by structuralists because these theories forego structural constraints of women's behaviour (Crompton, 2006; O'Reilly & Fagan, 1998). Especially the institutional context may constrain – but also support – women's economic situation after separation. What are institutions exactly? Institutional support for separated women covers a set of rules or arrangements that influence women's economic situation and behaviour (and that of separated women in particular). Economists tend to conceptualise institutions more narrow by defining them in terms of their restrictive characteristic for individuals' rational decision-making (Levi, 1990; North, 1990). Yet, institutions do not always have to constrain people's acts. They may also support certain behaviour. In his extensive treatise on institutions, Vrooman (2009) defines institutions as

socially constructed formal and informal rules that guide the behaviour of individuals via rights, duties, conditions, and sanctions. He notes that these rules are not slavishly followed by actors, but filtered by their own interpretations and that they may respond differently to the same rules depending on their characteristics. This definition thus also demands for multi-level research, stressing that – contrary to much social policy research that focuses on macro-level relationships for instance – interactions with individuals characteristics are also relevant. Moreover, the definition does not only focus on formal institutions such as the state – as is frequently done in social policy research –, but also considers informal ones such as customs and norms. Although I focus on the influence of the state in this study, I also examine the effects of cultural norms about working mothers, gender roles, and support by the family. In the following, I first elaborate on state support and constraints for separated women's employment situation, and then I discuss how culture may affect women's post-separation employment.

*Formal institutional support and constraints: effects of social policies*

Many scholars have shown that institutions – and the state in particular – affect women's employment, and that of mothers in particular (Gornick, Meyers & Ross, 1998; Stier, Lewin-Epstein & Braun, 2001; Stier & Mandel, 2009; Uunk, Kalmijn & Muffels, 2005; Van Dijk, 2001). Yet, do public policies influence the employment of women after a separation as well? Formal institutional support can affect women's post-separation employment situation via her economic position during the union. In her criticism on Esping-Andersen's (1990) well-known *Three worlds of welfare capitalism*, Orloff (1993) for instance argued that the state influences the power resources within gender relations in the family. More specifically, state policies would affect women's access to an independent income (outside of marriage): "The capacity to form and maintain an autonomous household relieves women of the compulsion to enter or stay in a marriage because of economic vulnerability" (p. 321). In this way, Orloff relates support from the state to women's economic exit costs out of marriage. The more institutions take away employment constraints for women, the more they provide economic independence for married women, and the better women's economic position will be when they are divorced or separated. The positive relationship between institutional arrangements and women's economic independence during the union has indeed been empirically shown (Stier & Mandel, 2009), but the association between social policies and women's employment after the union has dissolved has not been investigated yet. Due to the income loss that separation may involve, separated women may reconsider their employment

situation and working hours after separation and the state may encourage (or constrain) them to increase their employment.<sup>5</sup>

Hereby, it is important to distinguish between employment-related and income-related institutions. Employment-related state support may help women – and mothers in particular – to increase their working hours (or enter the labour market) after separation by taking away time and money restrictions of having children and thus facilitating the combination of work and child care. State employment support refers to all institutions that aim at providing equal opportunities for both genders on the labour market, such as the availability of public child care facilities, parental leave, but also the availability of part-time work. Although the effect of parental leave arrangements on women's employment in the long-term has been found to be ambiguous, such arrangements may still push separated women to enter the labour market and prevent them from exiting in the first place. Hence, I expect that employment-related institutions encourage women's employment after separation (*hypothesis 6a*).

Income-related state support, on the contrary, may indirectly and unintentionally affect separated women's employment. Income support may be provided in the form of welfare benefits by the state, but also child allowances and child maintenance schemes alleviate separated women's financial situation. As these institutions improve women's post-separation income situation of women (Uunk, 2004), the economic need to find a job or increase their working hours may be reduced. Income support does not only make it less necessary and attractive for women to work, many women may also experience a 'welfare trap' (see section on alternative income sources). Thus, I expect that more generous income support from the state will – unintentionally – lower separated women's employment (*hypothesis 6b*). It will especially discourage non-working women to enter the labour market or women with a low income to remain working since these women are eligible for welfare benefits and do not have good labour market prospects.

Formal institutions may also condition some of the micro-level relationships with women's post-separation employment. For instance, the institutional context may moderate the effect of women's economic dependence during the union on their post-separation employment situation. Ample state employment support may reduce the economic exit costs of marriage in a society because more employment opportunities for women and institutional arrangements supporting women's work may facilitate finding a job after separation (South, 2001) and reduce barriers to increase working hours after union dissolution. Hence, in

---

<sup>5</sup> Note that I am interested in the actual effect of institutional arrangements on separated women's employment, and not in what governments intend to achieve with certain policies.

countries with more equal employment opportunities for men and women, the effect of women's work history during the union on women's post-separation employment may be weaker because even women who were largely dependent upon their husbands – i.e. had few human capital – have more employment opportunities after separation (*hypothesis 6c*). More state support in a country will therefore encourage all separated women's post-separation employment, regardless of their work history, suggesting that the predictions derived from economic theory may be less adequate in societal contexts that support women's employment. In a similar way, the state may moderate the restrictive effect of children on separated women's employment. The effect of the age of the youngest child can be expected to be stronger in contexts with fewer state employment support as separated women may experience more restrictions to combine work and child care in such countries compared to countries with ample employment support from the state (*hypothesis 6d*).

*Informal institutional support and constraints: effects of cultural norms*

The cultural context may form an alternative explanation for the effect of state institutions on women's post-separation work as the association between state institutions on the one hand and cultural institutions on the other is high. Countries with more generous state employment support are most often also countries with less traditional cultural norms and traditions about marriage and the family (Andreß et al., 2006; Korpi, 2000; Pfau-Effinger, 2005; Uunk et al., 2005). In such countries, personal investments in the collectivity of the family are less important, meaning that individual family members are less inclined to adhere to traditional patterns of family obligations and are more inclined to reduce long-term emotional or economic investments in the family (Esping-Andersen, 2009; Goode, 1993). Trends towards less traditionalism have occurred in all fields of family life, but changes in the emotional and economic relationships within the marital union and between family members of different generations stand out the most. Indications that the marriage system is less traditional are for instance the acceptance and the custom to do paid work for mothers and adherence to an equal division of money and household tasks within couples. The commonness of part-time work could also be an indication of less traditionalism in couple's household arrangements, although it can also be considered as a way to maintain a traditional division of labour within couples since it does not lead to greater participation of women in household decision-making and an equal sharing of household tasks (Stier & Lewin-Epstein, 2000). Low reliance on support by the family network as a safety net shows that the – intergenerational – family

system is less traditional. Because these factors may also encourage separated women to increase their employment, they can be alternative explanations of cross-national differences in women's post-separation work.

In the literature, two reasons are mentioned for the relationship between formal and informal institutions (Hook, 2010; Pfau-Effinger, 1998; Uunk et al., 2005). On the one hand, social policies can be an outcome of existing social norms in a society. For instance, in countries where citizens believe that paid work is important for women's personal development, social policies will meet these demands and try to facilitate the combination of work and care, for instance by providing sufficient good quality public child care facilities. In this sense, social policies *reflect* existing norms. On the other hand, formal institutions may accelerate changes in social norms by being a role model for society. The causality in the previous example is then turned around: In countries with ample public child care provisions, citizens start more and more to believe that it is good for women to work outside the home.

Although the disapproval of working single mothers will be less strict than that of working married women, I still expect that cultural norms about working mothers may be relevant to consider. A good illustration of the influence of cultural norms on women's employment behaviour is that in some countries, single mothers with young children were for a long time explicitly not expected to work, but were assumed to focus on raising their children. This was the case in the UK and the Netherlands, for instance, where both governments did not treat lone mothers as workers – thereby requiring them to (find) work –, but provided them welfare benefits unconditionally if they had dependent children – at least until 1996 (van Drenth, Knijn & Lewis, 1999). A similar expectation holds for couples' values and behaviour regarding task specialization within the household. For instance, women who belonged to a couple in which both spouses equally contributed to the household income and in which household tasks were divided equally may be more likely to find economic independence important after a separation. They may also be more likely to separate in the first place as their expected and actual exit costs out of the union are lower (because such women can be expected to have invested more in their human capital during the union, i.e. the *underlying economic independence hypothesis*). In sum, in countries with cultural norms in favour of working mothers – single mothers included –, more egalitarian gender role values, and the custom to equally share income and divide household tasks within couples, separated women will increase their employment more than in countries with disapproving norms towards working mothers and in which its citizens adhere more to a traditional division of labour within the couple (*hypothesis 7a*).

Support by family members is yet another factor of the cultural context that may play a role. If there is a large family network present that can help out separated women by giving them financial support and housing, the economic need to work is lower. Although divorce is less common and less accepted by the family in countries where the family is more central in society, the family network in such societies still provides more support to divorcees in times of need than in less familialistic countries (Kalmijn, 2009). Thus, in countries where it is more customary to rely on the family as a safety net, separated women will increase their employment less than in countries where reliance on the family is less common (*hypothesis 7b*).

## **1.4 Research design: type of data and method**

### *1.4.1 Estimating micro-level influences on women's post-separation employment*

The employment consequences of separation can best be studied using longitudinal data because in cross-sectional designs causality is hard to assess. When comparing the employment of married women with separated women using cross-sectional data, the differences in employment levels may also be due to selection. If Becker's *economic independence* hypothesis is true, we can expect that women who separate are the ones with the lowest economic exit costs and thus the ones with the best employment prospects. Separated women may therefore be a selective group of women: Those with more human capital in terms of education and work experience. Hence, women who separate may have already been working more before the separation than partnered women who do not separate. It is therefore necessary to test the impact of separation on employment using data which measures the event of separation before the possible change in employment.

I analyse two types of longitudinal data: prospective (panel) data for short-term divorce consequences and retrospective (life history) data for a long-term perspective. Both have their advantages and disadvantages. In panel data – in which respondents are repeatedly asked about their current situation – the observations of events are considered accurate and reliable, but gathering this type of data is costly and suffers from the problem of panel attrition. This problem is particularly present when analysing the impact of separation because separated persons have a high probability to drop out (Jansen et al., 2009). Another problem is that panel data only provides information on states (e.g. marital status,

employment status) at certain time points (namely when the survey interviews were held), but the course of the events between these time points is unknown (Blossfeld & Rohwer, 1995). Life history data – in which respondents are asked at one particular moment in time to recall changes in their (marital and employment) history systematically – is less expensive, not liable to attrition problems, and is a better way to map an individual's course of events. These data are especially valuable for analysing long-term consequences of divorce. However, a major drawback of life history data is memory bias, although this problem seems to be occurring mostly for people with complex employment histories, which leads to an overestimation of career stability especially early on in their careers (Manzoni et al., 2010).

Although longitudinal data do better than cross-sectional data, the problem of selection may still persist since there may still remain unobserved factors that are related to both separation and employment. Such an unobserved variable is personality, a variable rarely measured in European longitudinal data – which is often socio-economic in nature. It is plausible to expect, for instance, that women who are more self-confident and more ambitious are more likely to separate and therefore are more likely to work more after separation. Think particularly of separated housewives from older cohorts who would have liked to work while married, but did not do so because of the strong adverse normative environment. Although these women invested little in their human capital during the union, they may still have good labour market perspectives after separation due to unmeasured personality traits. Not including personality in the analyses would thus bias the observed effect of women's employment during the union downwards (the women who worked little incorrectly appear to have good labour market outcomes). Two-step Heckman models are a good solution to correct for this possible selection bias in the work history effect on post-separation employment, although this method is not without problems (for a recent overview, see Fu, Winship & Mare, 2004). In principle, these problems could be overcome when using an experiment, but this is obviously irrelevant in the case of separation.

#### *1.4.2 Estimating macro-level influences on women's post-separation employment*

Different ways can be used to estimate the impact of institutions – and social policies in particular – on women's post-separation employment. Scholars have used typologies, packages, and separate continuous indicators to assess institutional effects on micro-level outcomes such as (divorced) women's income, deprivation, and employment (Aassve et al.,



2007; Andreß et al., 2006; Bradshaw et al., 1996; Gornick et al., 1998; Mandel & Semyonov, 2006; Pettit & Hook, 2005; Stier et al., 2001; Uunk, 2004; Uunk et al., 2005).

The use of typologies on pooled data sets of a large number of countries makes it possible to analyse many countries simultaneously without having to perform an in-depth analysis for each one separately and they provide a quick bird's eye view of cross-national differences (Uunk, 2004). This way of explaining institutional effects on behaviour has received much criticism, however. 1. the difficulty of classifying countries located at the border of two classes (hybrid types); 2. the existence of large within-regime type differences; 3. the fact that regime type effects can theoretically be explained in many ways because the typology is based on a fuzzy mix of underlying characteristics; 4. the enforcement of a continuously latent variable (institutions) into a categorical variable; 5. the confounding of regime type effects with other factors, such as economic, cultural or demographic country differences<sup>6</sup> (Gelissen & Arts, 2002; Hicks & Kenworthy, 2003).

The solution may be to 'disaggregate' such a broad policy measure (Gornick, Meyers & Ross, 1997; p. 50) and use domain-specific, quantifiable, continuous indicators. The first four problems are then solved or avoided. The fifth problem – disentangling institutional effects from spurious effects – is a problem for all cross-national research (see explanation further on). Estimating the effects of domain-specific indicators – such as parental leave arrangements, or the number of public child care provisions – implies that 'you know what you measure'. The need to make typologies domain-specific has also been acknowledged in the field of welfare regime research – examples are the employment regime typology of Gallie and Paugam (2000) and 'gendered' regime typologies (Andreß et al., 2006; Korpi, 2000; Lewis, 1992; O'Connor, 1993; Orloff, 1993; Sainsbury, 1996) – but the drawback of these studies is that they held on to measuring institutions categorically instead of continuously (by separate disaggregated indicators). An additional advantage of using separate continuous indicators is that additive or opposing effects of policies can be examined.

Still, separate continuous indicators have their disadvantages as well. Bradshaw and Finch (2002) – and Bradshaw in his previous studies – argue that the use of single indicators or a limited range of policies (especially if based on only one family type) misrepresent a country's overall effort in welfare provision. They bring up packages (e.g. child benefit package) as a solution. The impact of policies may be additive, so we should 'aggregate'

---

<sup>6</sup> For instance, how to interpret an effect of welfare regimes on women's employment? In several studies a welfare regime effect is attributed to the level of child care provision in a country, but it might as well be a cultural difference that causes the effect (e.g., in countries where women have more egalitarian gender role values, women's employment levels are higher). We cannot be sure unless we control for gender role and parenthood values in countries.

specific indicators into measures of policy packages (Gornick et al., 1997). As Gornick and Meyers state: “[...] families [...] experience policies not singly and distinctly but as combinations or packages of policies” (Gornick & Meyers, 2003: p. 255). Also, different kinds of benefits may fulfil the same function, as Rostgaard (2004) points out with her functional equivalence approach, and this would not have been captured when using only several separate indicators.<sup>7</sup> A methodological advantage of packages, moreover, is that they are more reliable than separate indicators; using multiple indicators for one concept increases the reliability of its measurement. This is particularly important for country statistics as they are in general less reliable than individual data. Country statistics are often constructed from different sources and sometimes different definitions are used while the same concept is being measured. Several scholars have used such packages – be it child benefit or family policy packages – to assess policy effects on (lone) mothers’ employment (Bradshaw & Finch, 2002; Bradshaw et al., 1996; Gornick et al., 1998; Mandel & Semyonov, 2006; Stier et al., 2001) and all found positive effects.

Again, a strength of using packages – as for single indicators – is that they are domain-specific and thus less of a ‘black box’ as is the case when using welfare regime types as institutional measures. A flaw of packages, on the other hand, is that it is not possible to distinguish between additive and opposing effects of specific policies, nor to derive specific policy implications.

All of the above mentioned pros and cons are less relevant in a case study. Although the results cannot be generalized to a larger population of more countries, the case study can ‘make a case’ (Ebbinghaus, 2005). Analyzing an extreme case can for instance clarify why a certain country is an outlier in previous analyses. Or, one can select a country which is crucial for testing a certain theory. Institutional effects on women’s post-separation employment can also be tested on the micro-level and, because on the micro-level more degrees of freedom are available), these effects can be more easily controlled for alternative explanations. An additional advantage of this approach is that many more data sets qualify for the study of institutional effects on women’s post-separation employment.

Because all of the above mentioned approaches of measuring institutional effects have their drawbacks, I do not choose to use one of these methods, but use a different method in each chapter. This is a fruitful way to check whether the different approaches lead to similar results.

---

<sup>7</sup> An example of complementing institutional arrangements is the equivalence of child allowances and child tax credits. In the UK for instance, child allowances are relatively low compared to those in other countries, but this is made up by the child tax credit system.

### *1.4.3 Multi-level method*

As in macro-micro level research the data used is on two levels (individuals nested within countries), scholars often use multilevel techniques (and most apply random effects models). The merit of such an analytical approach is that relationships between macro-level variables and micro-level outcomes can be corrected for the disturbing influence of composition effects. Also, this method is particularly useful for estimation of cross-level interaction effects; the moderation of the relationship between two individual-level characteristics by a macro-level variable. The technique provides more efficient coefficient estimates and unbiased standard errors (taking into account dependency between observations of individuals belonging to the same country). Finally, using multi-level analysis the variance in an individual-level outcome can be decomposed into variance on the individual level and variance country level, thereby assessing to what extent country differences can explain variation in a particular individual-level outcome.

Since more and more macro-micro data become available, the use of multi-level (random effects) techniques has become increasingly popular. However, the approach also strongly relies on certain assumptions. First of all, multi-level analysis is meant to be used to generalise the findings to the larger population of all macro-units (Snijders & Bosker, 1999). However, generalizing the findings from a number of countries is not so straightforward as usually not a sample of countries is drawn. In addition, this ‘sample’ of countries is often highly selective and has limited diversity since many studies have to rely on data of Western industrialized countries (Ebbinghaus, 2005). To what extent can we generalize multi-level findings of a group of countries to the population of all countries?

Secondly, and related to the previous issue, when using random effects models, the underlying assumption is that the variation between countries follows a standard normal distribution. To meet this assumption, not only a generalizable group of countries (i.e., not a selective group of countries) is required, but also a large number of countries. Snijders and Bosker (1999: p. 44) acknowledge this and state that  $N$  on the group-level (the country level in cross-national research) should be at least more than 10 to perform a random effects approach. Related to this, the number of country-level variables that can be included in the analyses is very low. One should thus be careful when making inferences using a random effects approach when a small number of countries is analysed and it is advisable to check the results for sensitivity of outliers. Ebbinghaus (Ebbinghaus, 2005) refers to the small  $N$ -problem as the ‘degrees of freedom’ problem.

#### *1.4.4 Data*

I use several micro-data sets to answer the questions posed in the beginning. As said earlier, all data sets are longitudinal as from such data causal relationships can more adequately be inferred. Although, institutional effects could have also been assessed using long-term longitudinal data of single countries, I use cross-nationally comparable longitudinal data to investigate institutional effects because institutional differences over time are usually smaller than cross-national institutional differences. Such datasets have become disposable from the nineties onwards. To perform macro-micro analyses, I use the European Community Household Panel (ECHP), which provides information on short-term (maximum six years) employment changes of separated women in 13 countries, and the Fertility and Family Surveys (FFS), which allows me to investigate changes in the long run (covering about 20 years) among 17 countries. Furthermore, I use a long-term panel data set of one country – the British Household Panel Survey (BHPS) – to examine the effect of institutions on the micro-level.

The data on the macro-level are derived from different sources (see appendix for an overview), of which the most important ones are the MISSOC database of the European Commission for income support provided by the state and a study of Tietze and Cryer (1999) for state employment support. The European Values study (1990/1999) is used to derive information on cultural norms in favour of working mothers (e.g., to what extent do women adhere to the role of housewife?) and support by family members (e.g., the proportion of young adults living with their parents).

### **1.5 Outline of the study**

In Table 1.1 the content of the empirical chapters of this dissertation is schematically presented. Although almost all chapters provide answers to all three research questions formulated in section 1.1.2, each chapter has a specific focus which is pointed out in column two. To examine women's economic consequences of divorce longitudinal data are needed, while the comparative perspective of this thesis requires a large number of countries. However, multi-nation panel studies with a sufficient number of divorcees are scarce and such data do not include the complete family and work histories of women. Cross-national

comparable retrospective surveys, on the other hand, usually lack information on incomes. To benefit fully from the advantages of both types of data, a mix of strategies is therefore needed; more specifically, I use a triangular multi-nation, multi-level, multi-method approach. For multiple countries (see column 3), I investigate several dependent variables (column 4), measure women's economic independence and institutions in multiple ways (columns 5 and 6), and use multiple data sets (with short-term or long-term information) and multiple analytical techniques (columns 7, 8, and 9). Moreover, three of the four chapters use data on two levels (last column).

As Chapter 2 and 3 focus on short-term consequences of employment, comparing several countries, the ECHP is used. In both chapters the effects of institutions on women's post-separation employment are estimated and both include cross-level interaction effects to test to what extent young children form a barrier for women's employment. Where Chapter 2 focuses on the macro-explanation of country differences (by institutions), correcting for micro-level composition effects, Chapter 3 explicitly includes micro-level factors to examine which women change their employment and why.

In Chapter 4, I investigate the long-term consequences of separation for women's employment, using the FFS. This chapter does not only focus on cross-national differences in the effect of separation on women's employment, but also tests a cross-level interaction between women's employment during the union and the institutional context. A variety of micro-level explanations is tested and country differences in women's economic independence during the union are illustrated and related to institutions. I also illustrate and examine the extent of selection bias in this chapter.

The last empirical chapter, Chapter 5, is a case study of one country. Using the British Household Panel Survey (BHPS), I study the long-term consequences of separation for women's income sources. The emphasis here is on the social class of the ex-spouse, which is assumed to be related to women's economic independence after union dissolution. Britain is a special case within Europe as British women are found to decrease their employment on average instead of increasing it (Jarvis & Jenkins, 1999; Jenkins, 2008). It is thus a crucial case for testing to what extent alternative income sources are related to women's employment after separation. In contrary to the emphasis on occupational status as stratifier in the US society, social class is considered to be more important for people's life chances in the UK.

In concluding Chapter 6, the answers to the research questions, the limitations of this study, and the implications for theory and policy are discussed.

*The measurement of institutional effects: A different approach in each chapter*

With respect to macro-level data, I also use a variety of data sources and approaches, depending on the focus of each particular chapter, and thereby benefiting from the advantages of each way of measuring institutions. In Chapter 2, I compare welfare regimes, and use Andreß' typology of divorce regimes. Emphasizing women's autonomy and economic dependence on family members, Andreß (2003) elaborated on the family of 'gendered' welfare regime types and created a divorce specific typology in which he clusters countries according to the division of labour between the market, the state and the family in providing support for women to maintain an autonomous household.

Chapter 3 covers the 'separate continuous indicators' approach and here I relate changes in women's employment after separation to the amount of single parent allowances and the availability of public child care provisions. The merit of this approach is that contradictory effects of income-related and employment-related can be disentangled, providing a more in-depth view of how state policies may influence separated women's employment. As I have longitudinal information on the macro-level indicators, the macro-level has 91 country-time points, which is sufficient to also control the policy effects for influences from a country's culture and labour market opportunities.

In Chapter 4, institutional support for separated women is measured by a self-constructed package which contains state support for women's employment. Here, a standardized sum is constructed measuring the extent of institutional support from the state (public child care and parental leave arrangements), but also other types of institutional support related to the labour market (such as the availability of part-time jobs). The measure is also supposed to cover a cultural dimension by including women's employment rate as a proxy for the approval of working women, although it also indicates women's employment opportunities as it reflects the availability of jobs in a country.

Chapter 5, finally, is a case study of one country, and within this country the effect of institutions is measured on the micro-level, relating income support from the state (welfare benefits) and the ex-partner (alimony) to women's employment, but also to her income situation in general. In addition, a period-effect is tested, capturing a change in employment-related institutions in the UK.

Table 1.1  
Overview of questions, measurements, data, and analyses of the empirical chapters

	Research question	Which countries	Dependent variables	How is women's economic independence during the union measured	How are institutions measured?	Dataset	Period studied	Type of analyses	Level
Chapter 2	1, 3	DK, FI, NL, BE, FR, DE, AT, UK, IE, IT, PT, ES, GR	Employment entry Employment exit Change in working hours		Divorce regimes: - Dual earner regime - Male breadwinner regime - Market regime - Family solidarity regime	ECHP	1994-2001 short-term	Event history, OLS regression	macro-micro
Chapter 3	1, 2, 3	DK, FI, NL, BE, FR, DE, AT, UK, IE, IT, PT, ES, GR	Employment entry Employment exit Increase in working hours Decrease in working hours	Income ex-partner Duration not working Marital union Age youngest child	Domain-specific indicators: State employment support: - Single parent allowances - Public child care availability Cultural norms: - Gender role values	ECHP	1994-2001 short-term	Event history, multinomial logistic regression	macro-micro
Chapter 4	(1), 2, 3	LV, EE, LT, FI, SE, CZ, SI, CH, EDE, WDE, NO, HU, AT, US, IT, ES, GR	Working hours Risk of separation	Work history during union Employment status before separation Union duration Marital union Age youngest child	Gender equality index: - State employment support: Public child care availability Parental leave arrangements Share of part-time work - Cultural norms: Female employment rate	FFS	1955-1999 long-term	Event history, fixed effects, random effects, Heckman selection model	macro-micro
Chapter 5	1, 2, (3)	UK	Employment Other income sources: - Alimony receipt - Welfare receipt - Repartnering Income	Social class ex-partner Employment status before separation Age youngest child	Alimony Welfare benefits	BHPS	1991-2006 long-term	Random effects logistic regression, fixed effects	micro

## **Chapter 2**

### **Female-supportive Policies and Women's Employment after Separation \***

#### **Abstract**

Using data on 13 countries from the European Community Household Panel (1994-2001), we quantify separated women's employment changes due to separation and study the impact of family-supportive policies on these changes. To investigate policy effects we use a welfare state typology distinguishing between four regime types of support for women: the market regime, the dual earner regime, the male breadwinner regime, and the family regime. Our dynamic, multilevel analyses demonstrate that European women only modestly increase their employment after separation. Women who already worked before separation hardly change their working hours. Our analyses also indicate regime type differences. Women in market regimes are the least likely to enter and the most likely to exit the labour market after separation. Female-supportive policies are most effective when it comes to young children: the presence of young children is the least detrimental for women's post-separation employment in dual earner regimes. These findings are in line with the literature on women's employment in general and suggest that female-supportive policies also affect separated women's employment.

\* This chapter was published in *When Marriage Ends* (Van Damme & Uunk, 2009).



## 2.1 Introduction

After a divorce, most women experience a substantial income decline. Many divorced women also start to depend on social welfare and experience increased poverty risks (e.g., Dewilde, 2002; Duncan & Hoffman, 1985; Finnie, 1993; Hoffman, 1977; Jarvis & Jenkins, 1999; Moore, 1978; Poortman, 2000; Poortman & Fokkema, 2001; Smock, Manning & Gupta, 1999; Uunk, 2004). These negative financial consequences can be explained – among other things – by the low labour supply of women before and after divorce (Bouman, 2004; Poortman & Fokkema, 2001), and by (the lack) of institutional support for income and female employment (Uunk, 2004). However, in contrast to income, changes in women's employment situation after separation have not been well investigated. Although existing studies have described these changes and investigated the effects of individual-level characteristics on post-divorce employment (Bouman, 2005; Bradbury & Katz, 2002; Duncan & Hoffman, 1985; Finnie, 1993; Haurin, 1989; Jarvis & Jenkins, 1999; Johnson & Skinner, 1986; Moore, 1978; Mueller, 2005), these studies were limited to single countries and consequently did not address whether a country's institutional arrangements matter.

In this contribution, we want to fill in the gap in the literature and describe and explain changes in employment after separation for women from 13 countries of the European Union. In particular, we will investigate whether institutional arrangements affect women's post-separation employment. Scholars have found that female-supportive institutions (in particular, public childcare provision) increase married women's employment (Gornick, Meyers & Ross, 1998; Kalleberg & Rosenfeld, 1990; Stier, Lewin-Epstein & Braun, 2001; Van Dijk, 2001), and they have also observed that these institutions mitigate the negative income consequences of divorce for women (Uunk, 2004). But do female-supportive policies influence women's employment after separation as well?

We will answer this question using data from the *European Community Household Panel* (1994-2001). These cross-national comparative, longitudinal data allow us to investigate short-term changes in employment. In our analyses, we will include dissolutions of both marriages and consensual unions, since more and more people in (Northern) Europe now live in cohabiting relationships and never get married. In addition, our focus will be on the *de facto* end of the relationship and not on the timing of legal divorce, because the legal process of divorce may take a long time (months or even years). During this period, people may already live separately and experience changes in their economic situation.

## 2.2 Theoretical background and hypotheses

### 2.2.1 *Previous findings*

Studies on the economic consequences of divorce suggest a general increase in labour supply after divorce, yet the findings are not fully consistent. Johnson and Skinner (1986) investigated individual employment changes among American women who divorced between 1969 and 1977. They revealed a sharp rise in women's working hours in the two years after a separation. Most of this increase was due to labour market entry (the employment rate increased from 68 percent before the separation to 88 percent afterwards). Others found increases in employment as well, but they did not find such large changes (Bouman, 2005; Bradbury & Katz, 2002; Duncan & Hoffman, 1985; Finnie, 1993; Haurin, 1989). Bradbury and Katz (2002), for example, revealed that in the US during the 1990s, 12 percent of women who lost their husbands (through death or divorce) started working, yet 10 percent stopped. Moore (1978) investigated changes in annual working hours among young American women around 1970 and found that whites increased their working hours after a divorce by 60 percentage points, and blacks by 14 percentage points. Moreover, 26 percent of the women who worked before a separation left the labour market after the split. For the United Kingdom, Jarvis and Jenkins (1999) even found a decrease in women's employment after separation: Fifty-nine percent of the wives studied worked before the divorce, compared to 51 percent afterwards. In addition, they found that 15 percent of the women who were employed before divorce stopped working afterwards. Lastly, a recent study conducted in Canada (Mueller, 2005) found no changes in divorced women's employment at all.

The finding that separated women do not increase their employment across the board is initially surprising, since the majority of separated women face a substantial reduction in adjusted household income, and employment may be a way to reduce financial distress. One reason why the effect of separation on female employment is not consistently strong and positive is that some women might anticipate a separation by increasing their employment before the separation. For example, Johnson and Skinner (1986) demonstrated a steady increase in working hours from the seventh year before separation to the year before separation. Yet others did not find a substantial pre-divorce increase in employment (Finnie, 1993). Poortman (2005) investigated anticipation differently by including the extent to which women expected their divorce to occur. She examined women's labour force participation, number of working hours, part-time work, and full-time work. Only in the case of full-time work did she find some support for anticipatory behaviour, but the effect was marginal.

Another reason why union dissolution does not consistently increase female employment is country-specific variations in the separation effect. In some countries, the majority of women react to divorce with an increase in employment, whereas in other countries, women reduce their working hours or stop working. We hypothesize that this cross-national variance in women's reactions to separation is due to differences in the institutional context. For instance, government policies moderate the income drop women face after union dissolution (Uunk, 2004) and hence influence employment decisions.

### *2.2.2 The effect of separation on women's employment*

Why do some women increase their employment after separation, others decrease it and still other women do not change? We used a simple micro-economic labour supply model (based on Becker, 1965; Blau, Ferber & Winkler, 1998) to account for these varying reactions. We assume that women's employment decisions are a trade-off between two commodities: time spent on paid work and time spent outside the labour market. The decision to work or not to work is based on a comparison between the market wage and a reservation wage – that is, the lowest wage rate at which it is worthwhile for a woman to work. If the market wage is higher than the reservation wage, the woman will seek a job; if it is lower, the woman will not seek a job. Moreover, she has to decide how many hours she wants to work depending on her wage and the opportunity costs of non-working hours. In theory, we assume that at every moment in time, this work/non-work choice plays a role. Hence, when the household and economic situation changes due to separation, women have to reconsider their employment decisions (in terms of whether they decide to work or not and the number of working hours).

Following the logic of this labour supply model, we can expect a separation to have a positive effect on women's employment. The reason for this expectation is the general deterioration in women's financial situation after divorce. Such deterioration occurs because of a loss of economies of scale (for example, increased housing expenses) and because of the traditional, gender-based task specialization in the prior marriage (for example, Poortman, 2000). Women who lived in traditional male breadwinner-type households can no longer rely on their partners' income and experience a drop in adjusted household income. These financial changes give separated women a financial incentive to work. Therefore, non-employed women may enter the labour market after separation and employed women may increase their working hours.

Of course, we assume that not all separated women will increase their employment to the same extent. We expect variation in employment changes depending on labour market,

institutional, and individual restrictions. On the individual level, human capital and children are important restrictions. Women with a low education and little labour market experience are less likely to find a (good) job. Having to take care of (young) children also reduces women's opportunities to work. Children cost time and money; time spent on caregiving cannot be spent on the labour market, and public childcare can be costly (Uunk, Kalmijn & Muffels, 2005; Van Dijk, 2001). The value of non-working time will be highest when women have children under 6 years of age, because these children do not attend school and require more intensive caretaking. Therefore, we expect separated women with young children to face more difficulties in increasing their employment than separated women without children or those with school-age children. Mothers with young children will also be more likely to exit the labour market after separation (under the assumption that they have alternative income sources). The costs and availability of (formal) childcare are important in this respect. We will discuss the effects of public childcare provisions and other female-friendly policies in the next section.

Labour market restrictions concern the availability of (part-time) jobs. The more employment positions there are available on the labour market, the easier it is for women to find jobs and the more likely it is that they will enter the labour market after a separation. Moreover, if part-time work is more common, women may have more opportunities to change (decrease or increase) their working hours: (Full-time) working mothers who have difficulties in combining work and caregiving will be less forced to exit the labour market after separation; and non-employed mothers may more easily find a job in which they are able to combine work and caregiving.

To summarize, we expect that women in general will increase their employment after divorce. However, some women face restrictions and will decrease their employment. In particular, we expect this to happen for mothers with young children.

### *2.2.3 A regime typology of family support*

Cross-national differences in family and work policies have an effect on women's employment. For instance, "female-supportive" policies such as public childcare provisions reduce the negative effect of children on female employment, encourage part-time work among women, and mitigate the costs of employment interruptions (Gornick et al., 1998; Mandel & Semyonov, 2006; Rosenfeld & Birkelund, 1995; Stier et al., 2001; Uunk et al., 2005; Van Dijk, 2001). Do public policies influence women's employment decisions after a separation as well? We expect that they do. After all, separated women may have to

reconsider their employment situation because their living situation (income, household situation) changes. Moreover, several studies have already revealed an impact of institutions on the financial consequences of divorce (Dewilde, 2002; Uunk, 2004).

In examining the impact of institutions on women's labour market participation after divorce, we have used a welfare state regime typology rather than quantifiable macro indicators. We believe that the institutional context of the 13 countries we analyzed cannot be captured well by a limited set of macro indicators (such as the percentage of children in public childcare and the level of single parent allowances), but involves multiple, interrelated institutional factors. These institutional effects can – given the limited degrees of freedom for testing such effects – be better portrayed by distinguishing qualitatively different country clusters. Or stated otherwise: “The analysis of country clusters enables us to identify commonalities and differences across regime types, even if we may not always be able to say definitively what it is about these countries that accounts for the variation observed” (Gornick & Jacobs, 1998: 693).

Welfare states differ in the basic principles and organization of their welfare state arrangements. The typology developed by Esping-Andersen (1990, 1999), which takes the role of the state, the market, and the family into account, is the most well-known. However, a disadvantage of his approach is that he considers women's entitlement to welfare only as workers, not as wives or mothers. According to Lewis (1992) and others (O'Connor, 1993; Orloff, 1993; Sainsbury, 1996) welfare state typologies need to incorporate family ideology as well. Therefore, we choose to follow Andreß et al. (in this volume) and use their typology of family support.

Andreß et al. base their typology on the extent of income and employment support provided by the state for women's economic independence, and the extent to which the market and the family have to step in if family policies are only rudimentarily developed. They distinguish four ideal types of regimes: the dual-earner model, the model of traditional division of labour (as a shorthand we use the term “male breadwinner model”), the market model, and the model of extended family solidarity (here: “family regime”). In the ideal-typical market regime there is low state support (both with respect to income and employment) for women's economic independence; support for women is left to the market. In contrast, in the dual-earner regime type, there is high state support for women: Countries within this regime type provide high levels of financial and employment support for women (e.g., by providing high child allowances and sufficient childcare facilities). In the male breadwinner regime, the state also plays an important role, but it is oriented towards a

traditional division of labour in which men are the main breadwinners. Consequently, the state provides high financial support for children but low employment support for women. Lastly, the family regime type is a model in which state support for women is low and family support high.

The Andreß typology implies that regimes may support separated women in three ways: through income support from the state (e.g., single parent allowances, alimony), through employment support from the state (e.g., public childcare provisions) and through family support (e.g., financial support via the family network). In order to gain insight into how the 13 EU countries in our analyses rank in terms of these different types of support and how they should be classified into the typology, Table 2.1 quantifies country scores on multiple institutional indicators. We measured income support according to levels of social assistance, child allowances, single parent allowances and child maintenance. Employment support is measured by the level of public childcare provision and an index of the quality of the childcare leave system (payment and duration). Family support is measured by a traditional family index (see notes, Table 2.1).

Table 2.1 shows that Denmark and Finland score high on income and employment support measures and low on family support, and that they therefore can be grouped into the dual-earner regime category. The Netherlands, Belgium, France, Germany and Austria are also characterized by high levels of state income support, yet employment support from the state is substantially lower than in Denmark and Finland. We have therefore grouped these countries in the male breadwinner regime cluster. The United Kingdom is the most obvious candidate for the market regime type: It provides low state employment support for women, even lower than the male breadwinner countries. Yet, it deviates from the ideal-typical market regime model in that it provides relatively high income support for separated women. One reason for this rather generous support may be the comparatively high number of single parents in the UK (Rowlingson, 2001). Italy, Portugal, Spain, Greece, and Ireland are classified within the family regime type. They have relatively low levels of income and employment support for women, but provide much high family support.

Table 2.1  
Classification of countries according to four models of family support

Regime	Income support				TOTAL	Employment support		TOTAL	Family support	
	Social assistance <sup>a</sup>	Child allowance <sup>b</sup>	Single parent allowance <sup>c</sup>	Child maintenance <sup>d</sup>		Public child care provisions <sup>e</sup>	Child care leave <sup>f</sup>		Traditional family index <sup>g</sup>	TOTAL
<i>Dual earner</i>	+	0	+	0	++	+	+	++	-	-
Denmark	20	137	1010	0	++	56	High	++	1.6	-
Finland	49	163	478	0	+	27	High	++	2.3	-
<i>Family</i>	-	-	-	-	----	-	-	--	+	+
Italy	21 <sup>h</sup>	144 <sup>i</sup>	474	- <sup>m</sup>	0	6	High	0	11.6	+
Portugal	-83	46 <sup>i</sup>	236	- <sup>m</sup>	----	12	Medium	0	11.6	+
Spain	-24	46 <sup>i</sup>	208	- <sup>m</sup>	----	5	Medium	-	12.2	+
Greece	-113	18	208 <sup>k</sup>	- <sup>m</sup>	----	3	Low	--	10.1	+
Ireland	32	76	492		0	20 (2)	Low	--	11.1	+
<i>Market</i>	0	0	+	0	+	-	-	--	0	0
United Kingdom	13	139 <sup>j</sup>	833	0	+	18 (2)	Low	--	5.6	0
<i>Male breadwinner</i>	0	+	0	+	++	-	0	-	0	0
the Netherlands	30	171	682	-	+	7	Low	--	4.5	0
Belgium	-20	217	805	0 <sup>n</sup>	++	30	Medium	+	8.0	0
France	-7	95	535	+	0	26	Medium	+	6.9	0
Germany	-24	231	549 <sup>l</sup>	++	++	6	Medium	-	7.0	0
Austria	-10	215	566 <sup>l</sup>	++	++	3	High	0		

<sup>a</sup> Disposable income of social assistance recipients (after housing costs) as a proportion of the mean for all OECD countries: average for nine household types, standardized for GDP per capita, 1992 (in PPP). Source: Gough, Bradshaw, Ditch, Eardley & Whiteford (1997).

<sup>b</sup> Legislative guaranteed monthly net allowance for families with two children, age 7 and 14 (including supplements), mean over the period 1996-2001 (in PPP). Source: Mutual Information System on Social Protection (MISSOC), European Commission (1997, 2002).

<sup>c</sup> Legislative guaranteed monthly net allowance for single parent families with one child of ten years old, mean over the period 1996-2001 (in PPP). This is the sum of 1. basic allowance for welfare dependency; 2. single parent allowance; 3. child allowance. Source: Mutual Information System on Social Protection (MISSOC), European Commission (1997, 2002).

<sup>d</sup> Sum of 2 indicators: 1. formal child maintenance liabilities (amount that will be paid by fathers with 1.5 average income who want to divorce from mothers with average part-time income needing 12 hours of child care a week, having 2 children, 5 and 9 years old); 2. relative value of advance maintenance, 1997 (£/month in PPP). Source: Corden (1999, p. 34, Vignette B).

<sup>e</sup> The number of available public child care places per 100 children under age three in publicly funded day care services, mean of 1990-1995 and 1998-2001. Source: Tietze & Cryer (1999), Van Dijk (2001), and OECD (2001). Data from 1998-2001 include both public and private provisions. Due to the high importance of the latter in the UK and Ireland, values are slightly distorted for these countries. Proportion of public child care provisions in 1993 between brackets.

<sup>f</sup> The scores low, medium, and high are created by Koopmans & Schippers (2003). Sum of maternity, parental, paternity and care leave. Payment and duration are given even weight. Source: Koopmans, & Schippers (2003, p. 28).

<sup>g</sup> Index of 5 indicators: 1. the national average household size, 2. the percentage of single adults in the age of 30-64 years, i.e. after the family formation period, and before mortality affects the outcome (the propensity to stay single), 3. the percentage of adults living in a consensual union, 4. the percentage of young adults under the age of 30 still living with their parents, 5. the percentage women aged 70-84 living with their mid-age children (30+), 1994. Source: Vogel (2003, p. 433).

<sup>h</sup> Unreliable figure.

<sup>i</sup> No child benefit above a certain income level.

<sup>j</sup> For 1998 and 1999, amount for first child refers to single parent families.

<sup>k</sup> No general social security schemes. We assume the allowance level is equal to the benefit level in Spain.

<sup>l</sup> National average of regionally different allowances.

<sup>m</sup> We assume that the child maintenance levels are comparatively low. According to Corden (1999) few lone mothers in the Southern European countries receive significant amounts of child maintenance.

<sup>n</sup> We assume the child maintenance level (for vignette B) is equal to the level in Finland, because the level in Belgium is closest to the level in Finland for vignette A (see Corden, 1999, p. 33).



Our classification of countries into welfare regimes deviates from the well-known Esping-Andersen typology in the cases of Ireland (EA-typology: in the liberal regime type with the UK) and the Netherlands (EA-typology: in the social-democratic type with Denmark and Finland). These changes reflect the role of family ideology and female-supportive institutions in these countries. For example, the Netherlands has an extensive welfare state and generous social welfare programmes, and in most respects, it belongs to the social-democratic regime. However, when it comes to supporting female employment, its institutions lag behind. In Catholic Ireland, family ideology is more in line with that of the Southern European countries than with the market regime in the United Kingdom. It values family support and provides comparatively low income and female-employment support. We wish to further note that not all countries fit neatly into one regime type, but that some countries are more hybrid types, sharing elements of distinct family regimes. Belgium, for example, belongs to the dual-earner regime type if we look at the level of public childcare provisions, income support for single parents and child maintenance. However, considering the country's general social assistance level, child allowances, childcare leave, and the traditional family index, we classified Belgium into the male breadwinner cluster. In our analyses, we will perform sensitivity checks for the two most hybrid types: Belgium and Ireland.

#### *2.2.4 Hypotheses*

Given the regime differences in income, employment, and family support – as well as our theoretical assumptions about (post-separation) employment – we can expect to see the following regime differences in women's employment after separation (see also Table 2.2). Firstly, we expect that separated women in dual-earner regime countries will have comparatively high odds of increasing their employment after a separation. Women's employment is highly encouraged by female-friendly policies, especially for women with young children. In addition, there is no large family network present that could help women out by giving them financial support; the state is the main safety net. This also encourages female employment after divorce. However, a factor which may discourage female employment is state-provided income support. The dual-earner regime provides relatively high amounts of income support – for separated women generally (social assistance levels are high) and for single separated parents in particular (cf. Table 2.1). The high level of income support – although it has changed in recent years and is more often means-tested – may pose a disincentive to work. However, we think that this disincentive from income support will not

outweigh the incentives provided by employment support and a lack of family support, since state income support only partially mitigates the income loss after divorce (Uunk, 2004): in other words, women can still improve their situation by working. An additional expectation has to do with the effect of young children: given the generous opportunities for combining work and care giving, we believe that in general, women's post-separation employment in dual-earner regime countries will not suffer much from having young children.

Secondly, we expect that separated women in the family regime type will have lower odds of increasing labour supply than separated women in the dual-earner regime type. The family regime type provides low state income support, which may be a financial incentive for separated women to work. Yet, women's employment is not encouraged by female-supportive policies: public childcare levels, for example, are comparatively low. In contrast to all the other regimes, an extended family system exists in the family regime. Separated women – especially mothers – may be more likely than they are in other regimes to fall back on their families for financial help or care in case they need it. However, we do not expect a general discouraging effect of strong family support on employment, since family support can take the form of both financial support (negative effect on employment) as well as informal care giving support (positive effect on employment). The well-developed informal care giving system within extended families may also give rise to a moderate (negative) child effect on post-separation employment: Women in family regime countries may still be able to continue (or start) working, provided the family helps out.

Thirdly, we expect that women in the market regime will have comparatively low odds of increasing their employment after a separation. Income support for single parents (single parent allowances and child maintenance) is rather high in the United Kingdom. This provides a disincentive to work. Furthermore, the market regime provides low female employment support – another financial disincentive. The low levels of childcare provision will also lead to a more negative effect of young children on post-separation employment (cf. Table 2.2).

Fourthly, and finally, we expect that women in the male breadwinner regime countries will have comparatively low odds of increasing their employment after separation. Income support in the male breadwinner regime is rather high. Furthermore, this regime type is characterized by a “traditional division of labour” ideology, and consequently by much lower levels of female employment support from the state. The effect of children will be the most negative of all the regimes investigated, since institutions favouring the combination of work

and care giving are rather poor, and alternative family care giving support is much less developed than in the family regime type.

Table 2.2  
Hypotheses on regime type differences in (a) post-separation employment and in (b) the effect of young children on post-separation employment

Regime	Work incentive			Separation-effect on employment (a)	Effect of young children on post-separation employment (b)
	Income support	Employment support	Family support		
Dual earner	-	+	+	+++	0
Family	+	-	0	++	-
Market	-	-	+	+	--
Male breadwinner	-	-	+	+	---

## 2.3 Data and method

### 2.3.1 Data

We investigated the employment changes of separated women as well as regime type differences using longitudinal data from the European Community Household Panel (ECHP) 1994-2001 (eight consecutive yearly waves). This dataset contains comparable cross-national information on employment, income and several demographic characteristics of the fifteen original EU Member States. The first wave is a sample of approximately 60,500 households and about 130,000 adults aged 16 years and older. The national samples are representative for the respective countries' populations. Demographic changes in population over time are reflected in the continuous development of the sample (through births, deaths and the creation of new households). Although panel attrition differs across countries, it is plausible to assume that this does not bias our results. A study conducted by Behr, Bellgard and Rendtel (2005) on panel attrition in the ECHP showed that attrition effects were minimal and did not bias estimates of dynamic analyses of income.

We analyzed thirteen countries: Denmark, the Netherlands, Germany, Belgium, France, the United Kingdom, Ireland, Italy, Greece, Spain, Portugal, Austria and Finland. For Austria, we have data from 1995 onwards; Finland joined the panel in 1996. We excluded Sweden from our analyses because the data for this country are in the form of pooled cross-sections. Luxembourg was excluded because of the small number of cases.

Our sample of analysis consisted of women aged 18 to 65 during the panel period who were not enrolled in educational programmes at the time of the interview and who

experienced a (marital) separation during the panel period ( $N=2,179$ ). We considered all union dissolutions: hence, women who separated twice (130) during the panel period were analyzed twice. Widows were excluded. We do not have information on prior marriages and cohabitations, thus we do not know which of the separations we analyzed are first separations and which are later separations. We define separation as a transition from marriage or cohabitation in one year to not living as a couple in the subsequent year. We also included women who remarried or began cohabiting quickly (at least one year after a break-up), because living with a new partner may be a strategy which compensates for the income decline caused by separation, and a life-event reducing labour supply. Unfortunately, we do not have information about repartnering within one year (between pairs of consecutive waves). It is plausible that the labour supply of women who found a new partner quickly is less affected by separation.<sup>1</sup>

### *2.3.2 Method*

In order to examine to what extent regime-type differences in women's employment changes after separation exist, we carried out three analyses. First, we looked at the transition into employment. Then we investigated exits from the labour market. Finally, we examined changes in working hours for those who had worked before separation.

In the first type of analysis, we focused on the odds of entering the labour market for women who did not work before a separation. We modelled this using a discrete-time event history analysis and used a time window of seven years (the year of dissolution and six years after the dissolution, see Figure 2.1): First, we observed the year of union dissolution ( $t=0$ ); then we determined whether the event of employment occurred in each calendar year after separation ( $t=1-6$ ). However, we were not able to follow all of the women in the panel for seven years. The reason for this is that we used an unbalanced panel: That is, we included all women who separated during the eight-year panel period and who participated in the panel for at least one year before and one year after a separation. Hence, our risk set consists of women who experienced a separation between 1994 and 2000 and who did not work in the calendar year before the divorce. We analyzed 668 women who experienced a total of 705 spells of non-employment. Of the 705 spells, 378 women entered the labour market between 1995 and 2001; the 327 remaining spells are right-censored. Due to censoring and attrition,

---

<sup>1</sup> A first argument for this expectation is that the income decline caused by separation is of short duration. Separated women may be able to tide over a short period with other income sources. A second argument is that they may not have found a job yet in such a short period.

our post-separation employment estimates will mainly concern short-term employment changes.

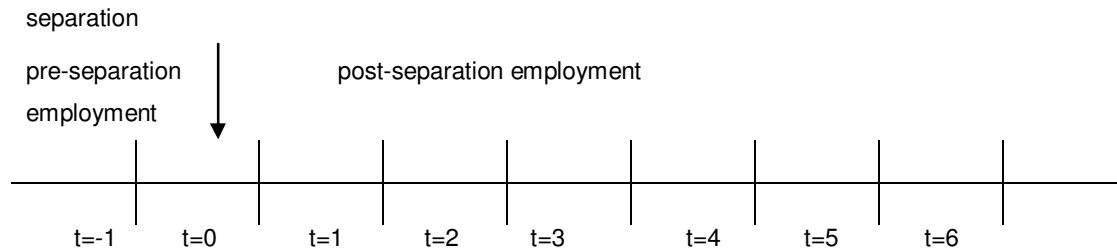


Figure 2.1  
Time window for the analysis of changes in employment for women after separation

In the second type of analysis, we examined the odds of exiting the labour market; we did this in the same way that we conducted the entry analysis. Our risk set was made up of women who worked in the calendar year before they divorced. We analyzed 1,209 women who experienced a total of 1,251 spells of employment. Of the 1,251 spells, 270 women exited the labour market between 1995 and 2001; the 981 remaining spells are right-censored. Again, for most women, we only know about short-term employment changes because of censoring and panel attrition.

The third type of analysis was done on the sample of women who were working before a separation and remained working afterwards. Here, we examined to what extent women changed their working hours. Again, we used a 7-year time window (Figure 2.1): We observed the year in which the separation took place ( $t=0$ ), then assessed the number of weekly hours a woman worked for pay in the calendar year before separation ( $t=-1$ ), and compared this with the number of working hours in the calendar years after separation ( $t=1-6$ ). We used an OLS regression analysis and estimated the number of working hours after separation while controlling for the pre-separation number of hours (for a similar pre/post design see Allison, 1990). We have valid pre-separation and post-separation data for 1,086 separations.

For all the analyses, we estimated robust standard errors using the cluster option in STATA. In this way we corrected the standard errors of the macro-level factors for within-country correlation. We performed sensitivity checks by including Belgium in the dual earner

and Ireland in the market regime cluster. The results of these checks are mentioned in footnotes if they differ from the results presented here.

### *2.3.3 Dependent variables*

We measured employment status (employed or not-employed) by asking the respondents whether “they were working at present in a job or business normally involving at least 15 hours of work a week”. One shortcoming of the ECHP data is that the data for women working less than 15 hours per week are not comparable with the hours information we have for women who work more than 15 hours. Women who worked less than 15 hours a week only reported the total numbers of hours they worked at their main job and any other jobs if they considered working to be their main activity. Women with small jobs who did not consider working to be their main activity did not provide information on their working hours. Therefore, we considered women who worked less than 15 hours a week as not working and women working 15 hours and more as working. Due to this omission in the data, the average number of working hours and changes in these hours will be underestimated, and the entry and exit numbers will be overestimated.

Working hours were derived from the following question: “How many hours per week do you normally work in your main job or business?” We truncated working hours greater than 60 per week (1.1 percent of pre-separation hours, 0.8 percent of post-separation hours).

### *2.3.4 Independent variables*

The most important independent variables in our models are the regime typology and the presence of children. As explained, we distinguished four regime types. The classification of countries into these four types was presented earlier in Table 2.1.

The presence of young children was measured by the *age of the youngest child* in the household after the separation, and was divided into three categories: 0 = no child; 1 = the youngest child is under 6 years old; 2 = the youngest child is older than 6 (time-varying variable). In the ECHP, people under the age of 16 living with the mother are considered to be dependent children.

We took bottom and ceiling effects into account by including women's pre-separation working hours. Furthermore, we controlled for some individual-level background variables that are known to influence employment: human capital (education and labour market experience), repartnering, and woman's age. Population composition on these individual-

level characteristics could be an alternative explanation for country and regime-type differences. *Education* was measured as the highest level of education achieved in the calendar year before separation. Three levels are distinguished in the ECHP data, using the International Standard Classification of Education (ISCED): 1 = less than second stage of secondary education (ISCED 0-2) and those who are still at school; 2 = second stage of secondary education (ISCED 3); 3 = university degree or comparable level (ISCED 5-7). *Labour market experience* was measured differently for the three analyses. In the analysis of employment odds, we used the number of years women did not participate on the labour market. In the analyses of exit and the number of working hours, we used the number of years between the most recent working year (before separation) and the year that women started their working life as a proxy for labour market experience before separation. *Repartnering* is defined as the transition from not living as a couple in one year to living together with a new partner in the subsequent calendar year. *Age* is a time-varying variable and refers to current age.

In addition, we controlled for each country's labour market situation. We did this in order to exclude the alternative explanation that regime-type differences in separated women's employment are due to labour market differences. In particular, we controlled for each country's unemployment rate and its share of part-time employment among women. The standardized *unemployment rate* is the number of unemployed persons as a percentage of the total labour force. The annual data are obtained from the OECD, are comparable over time, and conform the guidelines of the International Labour Office (OECD, 2005). The share of *female part-time employment* is the percentage of employed women who usually work less than 30 hours per week in their main job. Data included only women declaring usual hours (OECD, 2005).

## **2.4 Results**

In this section, we will examine regime-type differences in women's post-separation employment. First, we will present descriptive country results concerning employment changes after separation. Subsequently, we will investigate to what extent individual employment changes differ between regime types, controlling for the labour market situation and population composition of each country.

#### *2.4.1 A description of employment changes*

To what extent do women change their employment after separation? To answer this question, we will present different descriptive tables and figures showing women's employment in the year before and in the year after a separation: employment participation rates (Table 2.3), entry into and exit from the labour market (Figure 2.2), and changes in working hours (Table 2.4).

In line with earlier single country studies (see Section 2.2.1), we found that in the 13 countries of the European Union, women increased their employment only modestly after separation. The employment rate before separation was 63 percent, while after divorce it was 68 percent, a statistically significant increase of 9 percent (or 5 percentage points; see Table 2.3). However, separated women in Europe differed notably in employment changes. Separated women in Denmark, Italy, and the Netherlands stood out with a relatively large increase in post-separation employment (about 11 percentage points); in the UK, on the other hand, separated women actually showed a decrease in employment (also see Jarvis & Jenkins, 1999). This country variation cannot be fully explained by the regime typology we used. In contrast to our hypotheses, separated women in the dual-earner regime did not display consistently higher increases in their employment than women in the male breadwinner and family regime types. The figures show that these three regime types are on a par, showing similar increases in employment (between 6 and 8 percentage points). Our multivariate analyses will show whether this unexpected finding still holds when important individual-level (e.g., composition effects of pre-separation employment and education) and country-level characteristics (e.g., female unemployment and part-time work availability) are controlled for. That the market regime (the UK) ranked most negative with respect to changes in employment participation is more in line with the regime hypotheses: the high income support, and the low employment and family support in the UK may not pose an incentive for women to work after separation. Notwithstanding these regime type differences, the figures in Table 2.3 also indicate substantial within-regime variation. In the dual-earner regime type, for example, Danish women increased their employment after separation by 12 percentage points, yet Finnish women decreased their employment, although not statistically significant. Again, however, we warn against drawing premature conclusions before more advanced multivariate analyses have been conducted.



Table 2.3.  
The employment rates of separated and married women in 13 EU-countries

	Before separation	After separation	Net change	N	Married women
<i>Dual earner regime</i>	69.9	75.7	5.8**	276	75.8
Denmark	64.1	75.8	11.8***	153	77.7
Finland <sup>a</sup>	77.2	75.6	-1.6	123	74.3
<i>Family regime</i>	57.1	64.6	7.5***	438	43.1
Italy	60.7	72.0	11.2***	107	41.2
Portugal	58.0	67.0	9.0*	100	59.6
Spain	56.1	64.4	8.3*	120	33.8
Ireland	40.4	44.7	4.3	47	40.3
Greece	65.4	63.5	-1.9	52	42.4
<i>Market regime</i>	67.4	62.5	-4.9**	304	62.1
United Kingdom	67.4	62.5	-4.9*	304	62.1
<i>Male breadwinner regime</i>	61.3	69.2	8.0***	839	52.9
the Netherlands	53.1	65.0	11.9***	177	45.8
France	54.4	63.3	8.9*	158	54.4
Belgium	55.8	64.2	8.3*	132	60.9
Germany	68.0	75.2	7.2**	278	53.4
Austria <sup>b</sup>	73.6	75.5	1.9	106	53.8
Total 13 countries	62.6	68.0	5.4***	1857	50.5
X <sup>2</sup> (df) 4 regimes	15.7 (3)**	14.7 (3)**			8105.0 (3)**
X <sup>2</sup> (df) 13 countries	50.5 (12)**	38.1 (12)**			12021.8 (12)**

<sup>a</sup> The Finnish survey has only 6 waves (1996-2001).

<sup>b</sup> For Austria only information of 1995-2001 is available.

\* significant at 5%; \*\* significant at 1%; \*\*\* significant at 0.1%, one-tailed tested.

Source: European Community Household Panel 1994-2001 (own calculations)

The modest changes in employment observed above do not tell us the whole story, since a null overall change may result from a large proportion of women entering the labour market and a large proportion leaving the labour market. Figure 2.2 therefore displays entry and exit rates by country. It can be seen that in our sample of European countries, 13 percent of women entered the labour market after separation, whereas almost 8 percent left. The regime typology can only partly explain the existing country differences. While the market regime (UK) stood out with comparatively low entry rates and high exit rates, the other regime types did not systematically differ from each other. The rate of entry was, on average, 14 to 15 percent in the dual earner, family and male breadwinner regime, and the rate of exit 6 to 8 percent. Yet, we did find substantial within-regime variation, for example in the male breadwinner regime: while 20 percent of the divorced French women entered the labor market, in Austria only 8 percent entered.

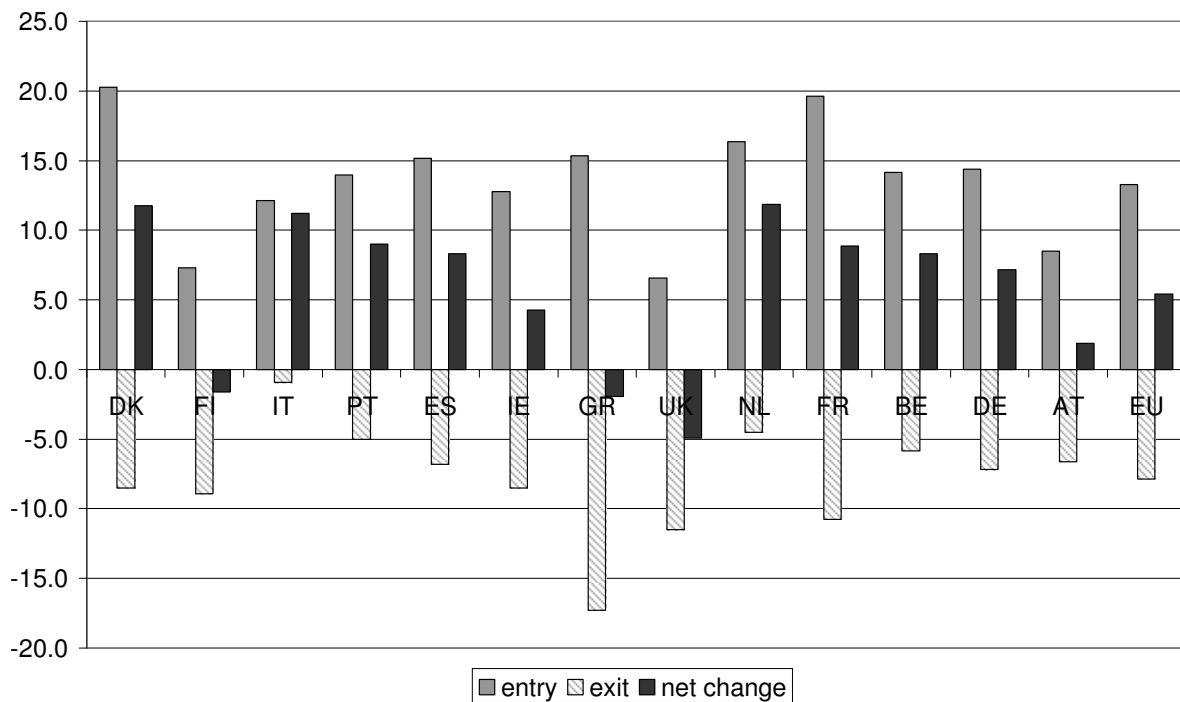


Figure 2.2

Entry, exit and net change on the labour market of women after separation in 13 EU-countries

Source: European Community Household Panel 1994-2001 (own calculations)

In the European countries we studied, women who continued working after separation did not significantly change working hours: their average working hours before separation were 37.3 and after separation 37.7 (Table 2.4). This holds for all countries, except for the Netherlands: Dutch women worked (significantly) more hours after a separation, yet the increase was small (from 32.3 hours before separation to 34.5 hours after separation). A reason why only Dutch women showed an increase may be the comparatively short working weeks prior to divorce: this bottom effect will lower the possibility to further decrease working hours. We will test this explanation in the multivariate analyses by taking the pre-separation working hours into account.

Our analyses have shown, so far, that separated women in Europe modestly increase their employment, notably by an increase in the share of working women, not by an increase in working hours for employed women. The general increase in employment participation suggests a positive effect of separation, yet women may also anticipate a divorce and increase their employment before the actual separation (Johnson & Skinner, 1986). Moreover, union

dissolution may be easier for women who can afford it, an argument pointing to reverse causation (employment affects separation). Many scholars have pointed at this selection effect (Poortman, 2005). Indeed, as Tables 2.3 and 2.4 show, separated women were a select group; on average, they were employed more often and worked more hours than married women (compare first column with last column). The difference in employment rates between these categories was especially high in the family and male breadwinner regimes: separated women in these countries either anticipated their separations more, or they were the ones who could afford a separation (the "elite" according to Goode, 1966). Anticipation and selectivity weaken the separation effect on employment that we observe, and may consequently 'disturb' the observed regime type differences. Again, we must wait for our more advanced analyses to find more conclusive evidence.

Table 2.4.  
The average number of weekly working hours of separated and married working women in 13 EU-countries

	Before separation	After separation	Net change	N	Married women
<i>Dual earner regime</i>	38.3	38.3	-0.04	169	37.2
Denmark	37.1	37.4	0.33	85	34.9
Finland <sup>a</sup>	39.6	39.2	-0.40	84	38.9
<i>Family regime</i>	38.0	37.8	-0.16	222	37.2
Spain	37.9	38.4	0.54	65	38.4
Italy	37.1	37.2	0.14	64	35.5
Portugal	40.8	40.7	-0.11	53	39.4
Ireland	32.0	31.3	-0.73	15	31.9
Greece	37.8	35.4	-2.48	25	38.2
<i>Market regime</i>	36.3	36.6	0.24	170	33.6
United Kingdom	36.3	36.6	0.24	170	33.6
<i>Male breadwinner regime</i>	37.0	37.9	0.93**	455	33.9
the Netherlands	32.3	34.5	2.19**	86	27.6
Germany	39.2	40.2	0.98	169	35.4
Austria <sup>b</sup>	36.6	37.1	0.48	71	36.0
France	36.7	37.1	0.38	69	35.7
Belgium	38.0	38.2	0.17	60	34.5
Total 13 countries	37.3	37.7	0.42	1016	35.6
F-value (df) 4 regimes	1.8 (3)	1.3 (3)			929.3 (3)**
F-value (df) 13 countries	4.5 (12)**	4.0 (12)**			869.2 (12)**

<sup>a</sup> For Austria only information of 1995-2001 is available.

<sup>b</sup> The Finland survey has only 6 waves (1996-2001).

\*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ , one-tailed tested.

Source: European Community Household Panel 1994-2001 (own calculations)

#### *2.4.2 Multivariate analyses of employment changes*

Our multivariate analyses are presented in Table 2.5. We started with analyzing the odds of labour market entry. The first multivariate model (Model 1A) estimates country effects, controlling for individual-level determinants (effects of control variables not shown). We have already observed country differences in post-divorce labour market entry in the descriptive section (2.4.1). Model 1A shows that after controlling for composition effects (such as education, and the presence of children), these differences still existed: for instance, Denmark (the reference country) had the highest odds of post-separation labour market entry, and the UK the lowest.

In the second model of Table 2.5 (Model 1B), we estimated regime type effects on entry odds. The estimates show that the regime type differences are more in line with our hypotheses than the descriptive figures of Figure 2.2. The ranking is that women in the dual earner regime had the highest chances to enter employment after separation, followed by women in the family regime, then women in the male breadwinner regime, and finally women in the market regime. This change in ranking is mainly due to the more negative scores in the multivariate analyses for the male breadwinner regime countries Belgium, Germany, and the Netherlands (see Model 1A). Apparently, initial (descriptive) changes in employment entry for these countries were obscured by compositional differences in the populations of separated women. Additional support for the clustering of countries into the four regime types was provided by a comparison of the statistical fit of models. The deviance test indicated that Model 1B (using regime types) did not perform significantly worse than the country model (Model 1A). The third model of employment entry (Model 1C), which included the national unemployment rates, showed that only a small part of these regime differences were due to differences in unemployment: only the position of the family regime changed in that the entry odds were closer to that of the reference group of the dual earner regime (no statistical difference anymore). This means that initial lower entry odds in the family regime countries (than the reference group of dual earner regime countries) may be explained by the higher unemployment rates in these countries.<sup>2</sup>

Our predictions about the interactive effects of regime type and the presence of young children fared quite well. Model 1D of Table 2.5 shows that in the reference category, the dual-earner regime, there existed no significant negative effect of young children on the odds

---

<sup>2</sup> Sensitivity checks – considering Belgium as a dual earner regime and Ireland as a market regime – displayed weaker regime type differences. Only the market regime significantly differed from the other three regime types in terms of women's post-separation entry odds. This indicates that regime type differences are sensitive to country clustering.

of labour market entry (evidenced by the insignificant effects of the presence of young children). The effect of young children for women in the family regime was not significantly different from that of women in the dual-earner regime. In other words, in the family regime, children did not pose a large hindrance for mothers to enter the labour market. This result may be explained by the extensive informal childcare provided by the (extended) family. In the market and male breadwinner regimes, the effect of young children on women's post-separation labour market entry chances was – as predicted – negative, and significantly different from that in the dual-earner regime. However, contrary to our expectations, the negative child effect is larger in the market regime than in the male breadwinner regime. In the market regime, even separated women with children over the age of 6 are hampered by the presence of their children.

In our second multivariate analysis, we investigated the country and regime differences on women's probability to exit the labour market after a separation (controlling for pre-separation working hours; Table 2.5). The first model (Model 2A) shows moderate cross-national differences in exit rates. Only Austria, Greece, and Italy differed significantly from the reference country Denmark: Separated women in Austria and Italy were less likely to exit employment, whereas separated women in Greece were more likely to exit employment – a similar finding to that in Figure 2.2. Consequently, regime effects were also weak. Models 2B and 2C showed that although women in the market regime had higher odds of exiting the labour market than women in the dual earner regime (the odds were 1.5 times higher), women in the family and male breadwinner regime types did not differ. The interactive effects of regime and children on the exit odds (Model 2D) did not provide much support for regime typology either. The effect of having a child under the age of 6 on the odds of exit is positive in all regimes, meaning that the presence of a young child increases the likelihood that separated women will leave employment. This child effect is stronger in the family regime type than in the other regimes – a surprising finding since the entry analyses showed that the presence of a young child in the family regime did not hinder employment entry.<sup>3</sup>

The third and final analysis estimated the number of post-separation working hours for women who continued to work after a separation (controlling for pre-separation working hours). The first model (Model 3A) displayed country variation in working hour changes

---

<sup>3</sup> When assigning Ireland to the market and Belgium to the dual earner regime cluster, the positive child effect in the family regime was smaller and did not significantly differ from the child effect in the dual earner regime.

after divorce. Whereas separated women in Germany increased working hours more than the reference group of Danish women, separated women in Greece, Ireland, and the Netherlands differed from Danish women by showing a decrease in working hours. The decrease for Dutch women is noticeable, given the increase in working hours observed in descriptive analyses (see Table 2.4). Additional analyses showed that inclusion of pre-separation working hours was responsible for this change in results. That is, separated Dutch women increased working hours because there were simply -- due to their low pre-separation working hours -- not much opportunities to decrease; if Dutch women were to work as long as other European women prior to divorce, they would have decreased working hours more, as the multivariate model (3A) showed. Model 3B of Table 2.5 showed that again that only the market regime differed from the other regimes in the employment changes after separation: The change in working hours was more negative than elsewhere. Interestingly, this regime difference disappeared after controlling for the share of female part-time work (which had a negative effect in itself; see Model 3C). This means that the more negative change in working hours for women in the market regime (the UK) was attributable to the relatively high rate of female part-time work. Or stated otherwise: Separated women in the UK reduced working hours after union dissolution because there many possibilities to do so. Additional analyses have shown that the same held for separated Dutch women.

The interactive effects of regime type and the presence of children on the working hour changes provided support for the regime hypotheses: for women in the dual-earner and family regime types, the effect of young children on post-separation working hours is significantly less negative than it is for women in the market and male breadwinner regimes (Model 3D). Separated women in the family regime even increased their working hours somewhat when they had a child of less than 6 years old. Thus, the presence of young children had a dual effect on the labour supply for divorced women in the family regime: On the one hand young children formed a restriction because they increased the odds of employment exit, on the other hand young children formed an incentive because they increased employed women's working hours.

Table 2.5.

Multivariate analyses of the changes in the employment of separated women (robust standard errors for regime effects), 13 EU-countries

	Odds of entry after separation <sup>a</sup>				Odds of exit after separation <sup>b</sup>				Working hours after separation <sup>c</sup>			
	Model 1A	Model 1B	Model 1C	Model 1D	Model 2A	Model 2B	Model 2C	Model 2D	Model 3A	Model 3B	Model 3C	Model 2D
<i>Dual earner (ref)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Denmark	-				-				-			
Finland <sup>a</sup>	-0.577* (0.339)				0.059 (0.330)				0.864 (0.623)			
<i>Family</i>		-0.356* (0.193)	-0.246 (0.152)	-0.281* (0.141)		-0.019 (0.226)	-0.037 (0.237)	-0.208 (0.280)		-0.302 (0.661)	-0.367 (0.595)	-0.660 (0.761)
Italy	-0.455 (0.349)				-1.056* (0.507)				0.303 (0.699)			
Portugal	-0.445 (0.362)				-0.286 (0.372)				1.118 (0.711)			
Spain	-0.692** (0.283)				0.040 (0.342)				0.948 (0.659)			
Greece	-0.356 (0.451)				0.842* (0.384)				-2.203** (0.874)			
Ireland	-0.669 (0.435)				0.591 (0.413)				-3.257** (1.087)			
<i>Market</i>		-0.966*** (0.227)	-0.987*** (0.178)	-0.056 (0.050)		0.188*** (0.053)	0.419* (0.235)	0.316 (0.252)		-0.804** (0.258)	0.222 (0.549)	2.559*** (0.620)
United Kingdom	-1.159*** (0.259)				0.180 (0.250)				-0.424 (0.514)			
<i>Male breadwinner</i>		-0.458* (0.217)	-0.463** (0.183)	-0.145 (0.116)		-0.133 (0.231)	0.025 (0.311)	-0.176 (0.321)		0.005 (0.398)	0.751 (0.599)	2.029* (0.912)
the Netherlands	-0.800** (0.261)				-0.510 (0.336)				-1.071* (0.593)			
Belgium	-0.998** (0.335)				-0.531 (0.389)				1.059 (0.659)			
France	-0.370 (0.278)				0.238 (0.303)				-0.366 (0.635)			
Germany	-0.635** (0.263)				0.281 (0.265)				1.246** (0.525)			
Austria <sup>b</sup>	-0.442 (0.366)				-0.804* (0.388)				0.380 (0.639)			
Unemployment rate			-0.025* (0.015)	-0.020 (0.015)								
Female part time work							-0.011 (0.012)	-0.011 (0.012)			-0.049* (0.024)	-0.060* (0.025)

Table 2.5 (continued)

No children (ref)	-	-	-	-	-	-	-	-	-	-	-	-
Child < 6 years	-0.520*** (0.161)	-0.489* (0.252)	-0.494* (0.249)	0.001 (0.368)	1.003*** (0.167)	0.935*** (0.165)	0.911*** (0.163)	0.551* (0.245)	-3.047*** (0.373)	-2.947* (1.320)	-3.070* (1.332)	-0.752*** (0.172)
Child > 6 years	0.002 (0.173)	0.027 (0.167)	0.035 (0.168)	0.159 (0.308)	0.185 (0.175)	0.181 (0.155)	0.152 (0.157)	0.068 (0.080)	-1.160*** (0.311)	-0.976 (0.570)	-1.086* (0.582)	0.313 (0.850)
Dual earner * child < 6 (ref)				-				-				-
Family regime * child < 6				0.159 (0.520)				0.697* (0.402)				1.902* (0.721)
Market regime * child < 6				-1.347*** (0.339)				0.380 (0.288)				-6.099*** (0.193)
Male breadwinner * child < 6				-0.861* (0.429)				0.288 (0.430)				-3.625* (1.886)
Family regime * child > 6				0.138 (0.309)				-0.199 (0.404)				0.125 (1.241)
Market regime * child > 6				-1.235*** (0.292)				-0.153 (0.152)				-3.583*** (0.850)
Male breadwinner * child > 6				-0.136 (0.319)				0.387** (0.148)				-1.879* (0.990)
-2LL / R2	1634	1644	1642	1626	1829	1864	1862	1856	0.31	0.30	0.30	0.31
$\Delta$ -2LL Mii-Mi ( $\Delta$ df) / $\Delta$ R2 Mii-Mi		-9.2 (9)	1.6 (1)	16 (6)**		-35 (9) ***	1.9 (1)	6.5 (6)		-0.01	0.00	0.01

<sup>a</sup> women who were non-working before separation (number of separations: 705; number of events: 378; number of person years: 1650)

<sup>b</sup> women who were working before separation (number of separations: 1209; number of events: 270; number of person years: 3782)

<sup>c</sup> women who were working before and after separation (number of separations: 1086; number of person years: 3779)

Note: unstandardized coefficients, standard errors between brackets; \*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ , one-tailed tested.

Models control for unemployment rate (entry), share of female part time work (exit, hours), pre-divorce working hours (exit, hours), pre-divorce education, pre-divorce labour market experience (exit, hours), duration not working (entry), repartnering, post-divorce age, whether married or cohabited before separation, whether in school before separation (entry).

Source: European Community Household Panel 1994-2001 (own calculations)



## 2.5 Conclusions and discussion

In this chapter, we described and explained changes in employment of women after separation. Using data collected from 13 EU countries in the 1990s, we quantified employment before and after separation and estimated the effect of the institutional context on the changes in employment.

First, we conclude that on average, European women changed their employment only modestly after separation. The employment rate before separation was almost 63 percent; after separation it was 68 percent, an increase of 9 percent. In the 13 countries of the EU, 13 percent of women entered the labour market after a separation and almost 8 percent left. Working women hardly changed their working hours; the overall increase was insignificant. However, this pattern of employment changes differed across countries: In the Netherlands and Denmark, for example, women participated more often on the labour market and worked somewhat more hours after separation, whereas in the United Kingdom, women participated less often after separation.

Secondly, we conclude that female-supportive policies affected women's post-separation employment. Independent of compositional differences in the populations of separated women across Europe, and independent of other macro factors such as the national unemployment rate, we observed systematic differences between distinct regimes of institutional family support. Women in the dual-earner regime type experienced the highest odds of employment entry after separation, the lowest odds of employment exit, and highest increase in working hours for those working. Separated women belonging to the liberal market regime experienced the worst labour market outcomes: The lowest odds of entry, the highest odds of exit, and a decrease in working hours for those working. Separated women belonging to the male breadwinner and to the family regime ranked in between these extremes with respect to entry chances, and did not differ from the dual earner regime with respect to employ exit and working hour changes. In addition, the regime types also differed systematically in terms of the effect of young children on women's post-separation employment. In the dual-earner and family regimes, the presence of young children posed less of an obstacle to separated women to increase their employment than it did in the market and male breadwinner regimes.

These regime differences support institutional explanations of women's changes in employment after separation. In specific, they lend credit to the role played by employment support from the state, not to the role played by income support from the state. The male

breadwinner, market, and dual-earner regime countries have comparable levels of income support for separated women, yet these countries differ substantially in labour market outcomes for separated women (mothers in particular). The regime differences in separated women's labour market outcomes are more in line with institutional employment support for women: women in the dual earner regime, a regime type with ample support for female employment, enter employment after separation more than women in other regime types. Apparently, female-friendly employment institutions not only affect the employment decisions of (married) women, but also affect women's decisions after important life events like divorce. This is especially true for single mothers, since institutions can facilitate the combination of work and care for children.

One non-state institution that seems to be important is family support. Although in the family regime countries state employment support for women is low, women in these countries did not experience large negative changes in employment thanks to the role of extended families in providing informal childcare. Family support therefore seems to be a substitute for employment-supportive policies. However, financial support received from the family (often in the way that divorcees come to live with other family members) may pose a disincentive effect. It would be interesting for further research to investigate these various, possibly counteracting institutional effects of family support.

In our view, explaining separated women's employment changes by a typology of countries into clusters based on family support policies has been fruitful, yet we still are ill-informed about the precise mechanisms that affect post-separation employment. We assume that employment and family support are important, but what is the magnitude of these effects, and what precise institutions matter? Regime typologies are not successful in answering these questions. In addition, they suffer from classification problems (assigning countries to clusters is difficult and may influence estimates of regime differences – as our sensitivity analyses showed), from lack of dynamics (institutions change), and from within-regime variation. In principle, questions on the precise mechanisms and magnitude of institutional effects can be better answered in analyses with quantifiable institutional indicators. Such a research design was not feasible in our analyses of 13 countries, but it could be in the near future. We could wait for data from other countries, but it would also be wise to investigate other ways. One approach would be to take institutional measurements for several countries at several points in time, yet this way is still seriously hampered by the (un)availability of information. Another way is to test the effects of institutional changes using longer running panel data.



## **Chapter 3**

### **The Employment of Separated Women in Europe: Individual and Institutional Determinants \***

#### **Abstract**

Studies on the economic consequences of divorce for women have paid little attention to changes in employment. In this chapter we investigate changes in employment for separating women and the impact of individual and institutional factors on these changes using data on thirteen countries from the European Community Household Panel (1994-2001). Our dynamic analyses of the odds of employment entry and exit and changes in working hours demonstrate that European women only modestly increase employment after separation, although in some countries this change is larger than in others. Important individual-level determinants of employment changes are education and labour market experience (positive effects), health (positive effect), and the presence of young children (negative effect). Institutional factors have opposing influences: More generous public childcare provisions encourage the employment of separated women, whereas more generous allowances for single parents discourage employment. The results underline the importance of distinguishing between income- and employment-related institutions in studying outcomes of union dissolution.

\* This chapter was published in the *European Sociological Review* (Van Damme, Kalmijn & Uunk, 2009).

### 3.1 Introduction

In the past decades many studies have examined the effect of divorce on women's income. Studies have shown that the majority of women experience a large income drop after separation (e.g. Andreß et al., 2006; Holden & Smock, 1991; Poortman, 2000; Uunk, 2004). The income loss can be up to 50 percent, depending on how income is measured (Poortman, 2000). Important determinants of income decline are loss of economies of scale, lack of women's human capital investments, and the presence of children after divorce. Institutional arrangements like welfare benefits and childcare provisions mitigate the negative income consequences for women (Uunk, 2004). Divorce is also found to increase poverty rates (Dewilde, 2002; Duncan & Hoffman, 1985; Finnie, 1993) and welfare dependency among women (Poortman & Fokkema, 2001).

Although employment reduces the negative financial consequences of divorce (Bouman, 2005; Poortman & Fokkema, 2001), in the literature on the economic consequences of divorce little attention is paid to changes in women's employment. Studies by Mueller (2005), Bouman (2005), Bradbury and Katz (2002), Duncan and Hoffman (1985), Finnie (1993), Haurin (1989), Jenkins (2008) described changes in labour supply after divorce using longitudinal data, yet did not examine in detail which factors explain these changes. Two older studies from the US by Johnson and Skinner (1986) and Peterson (1989) tried to explain employment changes by age, human capital, and the presence of children, but they hardly found significant effects. A more recent study by Covizzi (2008) for Switzerland used longitudinal data to look into the odds of unemployment after divorce but did not address other employment changes.

In this chapter we describe and explain changes in employment after union dissolution for European women. We first focus on individual-level explanations, notably the impact of financial incentives, human capital investments, and time restrictions. Our second focus is on macro-level explanations, in particular the role played by institutions that aim to improve women's socio-economic position. Cross-national comparative studies for Europe on the financial consequences of divorce for women have shown that more generous social welfare and public childcare provisions diminish the negative income effects of divorce (Dewilde, 2002; Uunk, 2004). We study whether such institutional factors also have an impact on separated women's employment. This is important because we expect that institutions have opposing effects on employment. Employment-related institutions --like

public childcare provisions-- may enhance separated women's employment as these institutions lower the costs associated with employment, yet income-related institutions --like social welfare-- may have a negative effect. High levels of social spending could form a disincentive for separated women to find a job.

This chapter addresses the following research questions: *(a) To what extent do women change their labour supply after separation? (b) To what extent can these changes be explained by individual and institutional factors?* With changes in labour supply, we refer to entry into employment for non-working women and changes in working hours (including exit) for working women. We answer these questions using longitudinal data from the European Community Household Panel (1994-2001) on thirteen European countries. We include dissolutions of both marriages and consensual unions since more and more people in (Northern and Western) Europe live in cohabitation and never get married.

### **3.2 Theoretical background and hypotheses**

Research findings on the labour supply changes of divorced women are not fully consistent. Most studies observed an increase in employment (Bouman, 2005; Bradbury & Katz, 2002; Duncan & Hoffman, 1985; Finnie, 1993; Haurin, 1989; Johnson & Skinner, 1986; Peterson, 1989; Poortman & Fokkema, 2001), but some found no change (Mueller, 2005), or even a decrease (Covizzi, 2008; Jenkins, 2008). This inconsistency is initially surprising. Most divorced women face a substantial reduction in adjusted household income and employment can be a way to reduce financial distress.

There are two possible reasons for the inconsistent outcomes. A first reason is that women anticipate a divorce by increasing their employment before the divorce. Evidence for this explanation is mixed, however (Finnie, 1993; Johnson & Skinner, 1986; Poortman, 2005). Another reason is country variation in the divorce effect. In some countries, the majority of women may respond to divorce with an increase in employment, whereas in other countries women may reduce their working hours or stop working. Such cross-national variance in women's response to separation might be due to differences in the institutional context. Women-friendly employment policies increase women's employment (Gornick, Meyers & Ross, 1998; Stier, Lewin-Epstein & Braun, 2001; Uunk, Kalmijn & Muffels, 2005; Van Dijk, 2001). Yet, income-related policies may decrease women's labour supply after

separation since these policies moderate the income drop after union dissolution (Uunk, 2004), and therefore the economic need to work.

### *3.2.1 Separation effect*

Why do some women increase their employment after separation, others decrease it, and still other women do not change? We expect that a separation generally has a positive effect on women's employment, because women's financial situation deteriorates after divorce. Such deterioration occurs because of a loss of economies of scale (for example, housing expenses) and because of the traditional, gender-based task specialization in the prior marriage (e.g., Holden & Smock, 1991; Poortman, 2000; Sørensen, 1994). Women who lived in traditional male-breadwinner type households can no longer rely on their men's income and experience a drop in adjusted household income. According to micro-economic labour supply theory these financial cutbacks give divorced women an increased financial incentive to work (Becker, 1965; Blau, Ferber & Winkler, 1998). They are likely to enter the labour market after separation and to increase their working hours.

### *3.2.2 Financial incentives*

Women may also change employment after divorce for additional financial reasons. First, women can experience a need to do paid work if they fall into poverty after divorce; getting a job may help them out of poverty. Second, a relative decline in income can form an incentive as well. Women who were married to a man with a high income, will tend to lose relatively more financially than women who were married to a man with a lower income. Given that people want to retain their standard of living, women from previously prosperous households will have a stronger financial incentive to increase employment than women from less prosperous households. If both mechanisms hold --a necessity to increase employment in order to escape poverty, and a necessity to increase employment in order to maintain a high standard of living--, we expect a U-shaped effect of ex-partner's income (a proxy for the prior financial situation) on women's employment: High employment for women who were married with a husband with a low income, lower employment for women who were married to a husband with a medium income, and high employment for women who were married to a husband with a high income. Due to the endogeneity of work and income, we cannot estimate the causal effect of income loss and poverty on employment directly.

### *3.2.3 Alternative coping strategies*

Employment may not be the only way to cushion income loss after divorce (Duncan & Hoffman, 1985; Jenkins, 2008; Poortman & Fokkema, 2001). First of all, in some countries divorced women may receive welfare benefits. Second, some women can fall back on other income sources not related to labour, such as capital income, income from renting property, and private transfers. Third, remarriage and living arrangements with parents can be sources of income as well. Women may move to their parents' house to reduce fixed costs, such as housing expenses, and profit from the economies of scale of a larger household. Cohabiting with a new, employed partner reduces the necessities to earn an own income and takes away the financial incentives to increase employment (Dewilde & Uunk, 2008). We expect that all these alternative income sources decrease women's post-separation employment.

The causal nature of the relationships between these alternative strategies and employment is not fully certain. Women may choose not to increase their employment because they are living on welfare, or they might start living on welfare because they are not able to find a job. The same applies to the association between remarriage and living with family on the one hand and women's employment on the other. Unfortunately, we do not have information about the decisions women make in choosing a certain strategy to obtain income. We did not try to disentangle these recursive relationships, because we have panel data with a limited time span. In addition, we did not include welfare on the individual level, because eligibility for welfare and work are competing categories.

### *3.2.4 Resources and restrictions*

Post-divorce labour supply also depends on resources and constraints. Women who invested more in their human capital before the divorce, such as education and labour market experience, will have better opportunities in finding a (good) job after divorce.

In their attempt to earn a living, women also face time constraints, health constraints, and labour market restrictions. Having to take care of children reduces the opportunities to work. Children cost time and money; time spent on care cannot be spent on the labour market and public childcare can be costly (Uunk et al., 2005; Van Dijk, 2001). Moreover, the value of non-working time will decrease as children age because older children require less intensive caretaking (Leibowitz, Klerman & Waite, 1992). Hence, we expect separated women with young children to face more difficulties in increasing their employment than separated women with older children. Another restriction is health. For women with poor health it can be less easy to increase their working hours or find a job.



Thirdly, the availability of jobs may constrain women's employment. The more jobs there are available, the easier for women to find a job and the more likely they will enter the labour market after separation. In addition, we expect that in countries with more part-time work, separated women more often change their working hours because there are more opportunities to change. Because of this flexibility, we also expect fewer exits from employment in countries with more part-time work.

### *3.2.5 Institutions*

Public policies affect married women's employment, especially that of mothers (Gornick, Meyers & Ross, 1998; Stier, Lewin-Epstein & Braun, 2001; Uunk et al., 2005; Van Dijk, 2001). Yet, do public policies influence the employment decisions of women after a separation as well? We believe it is important to distinguish between income-related institutions and employment-related institutions. Employment-related institutions directly affect separated women's work: Arrangements like public childcare can directly take away time and money restrictions and increase women's chances on the labour market. Women-friendly employment policies are therefore likely to encourage the employment of separated women.

Contrary to employment-related institutions, income-related institutions, such as social welfare, are arrangements indirectly affecting the employment of divorced women. These institutions improve the post-divorce income situation of women (Uunk, 2004), which can result in a reduced necessity to find a job (the economic needs decrease). Moreover, income support could increase the reservation wage, which makes it less attractive for women to start working, because the difference with the market wage --and consequently their income improvement-- becomes smaller. In countries with high welfare benefits, women on welfare could even experience a 'welfare trap'. In these countries, labour income will still be larger than welfare payments, but additional welfare-specific benefits, such as housing benefits, are lost and these losses can be larger than the income obtained from working. Thus, we expect that higher social welfare will – unintentionally – lower divorced women's labour supply. It will especially discourage non-working women to enter the labour market since these women are eligible for welfare benefits.

We also expect that institutions modify the effect of individual-level determinants of employment. Policies will aim mostly at vulnerable groups (the poor, women with children). Hence for these groups the impact of institutions will be largest. A first example is the interaction of childcare provisions with the age of the child. We expect that the negative

effect of young children on employment will be weaker in countries with ample public childcare provisions than in countries with few public childcare provisions, because public childcare is targeted at women with young children. A second example is the interaction of social welfare provisions with the effect of ex-partner's income. We expect that for women living in countries with generous social welfare, the effect of ex-partner's low income on women's post-divorce employment is weaker than for women living in countries with less generous social welfare. The reason for this is that welfare benefits could take away the financial incentives for low income groups to increase employment.

Our study investigates institutional effects by domain-specific institutional indicators and not by comparing different types of (gendered) welfare regimes (e.g., Esping-Andersen, 1999; Lewis, 1992; Orloff, 1993). The use of typologies for explaining institutional effects on behaviour has received much criticism (see Gelissen & Arts, 2002; Hicks & Kenworthy, 2003 for a detailed discussion). By using domain-specific, quantifiable, institutional indicators we tackle several problems of typologies, like large within-regime type differences and hybrid types.

### **3.3 Data and method**

#### *3.3.1 Data*

We use longitudinal panel data (eight yearly waves) from the European Community Household Panel (ECHP) 1994-2001. This dataset contains cross-national comparable information of fifteen EU-Member States. The national samples are representative for the country's populations. Although panel attrition differs across countries, a study conducted by Behr, Bellgard and Rendtel (2005) showed that attrition effects were minimal and did not bias estimates of dynamic analyses of income.

We analyse thirteen countries (see Table 3.1). Austria joined the panel in 1995 and Finland in 1996. We exclude Sweden from our analyses because the data for this country are pooled cross-sections. Luxembourg is excluded because of the small number of cases.

Our sample of analysis consists of women aged 18 to 60 at the time of separation who were not in education (as main activity) at the time of interview and who experienced a (marital) separation during the panel period ( $N = 2,167$ ). We have valid pre- and post-separation data on employment for 1,848 separations. All union dissolutions are considered,

hence women who separated twice (130) during the panel are analysed twice. Widows are excluded. We do not have information on prior marriages and cohabitations, thus we do not know whether the separations we analyse are first or later separations. We define separation as a transition from marriage or cohabitation in one wave ( $t_1$ ) to not living as a couple in the subsequent wave ( $t_0$ ). We include a dummy in the analyses to see whether employment changes of previously married women differ from previously cohabited women. We also include women who remarry or cohabit as of the first wave after break-up ( $t_1 - t_6$ ). Unfortunately, we cannot identify immediate repartnering (from one partner at  $t_1$  to another partner at  $t_0$ ) because the partner identification number is incomplete. The employment of these women will probably be the least affected by separation.

### 3.3.2 Method

After descriptive analyses of changes in women's employment around divorce, we carry out two explanatory analyses. In the first analysis we examine the odds of entry for women who did not work before separation.<sup>1</sup> We use a discrete-time event history analysis using a time window of seven years: First, we observe the wave of union dissolution ( $t_0$ ), then we determine in each wave after separation whether the event of entering employment occurred ( $t_1 - t_6$ ). Our first risk set consists of 659 women who experienced a separation in the panel period and who did not work in the wave before the divorce. Observations are censored in 2001, or when women have entered the labour market or leave the panel.

In the second analysis we examine to what extent women who worked before the separation change their working hours or stop working (exit).<sup>2</sup> Again, we use a discrete-time event history analysis and a seven-year time window: We observe the wave in which the separation took place ( $t_0$ ), then assess the number of weekly hours a woman worked for pay in the wave before separation ( $t_1$ ), and compare this with the number of working hours in the waves after separation ( $t_1 - t_6$ ). The dependent variable is a multistate variable with four outcomes (stability (reference), increase, decrease, and exit). The models we use are multinomial logistic regressions. We do not only examine the first change in hours after divorce, but also later changes.<sup>3</sup> We do this because women may change their working hours gradually and therefore later post-divorce changes in working hours may still be a consequence of divorce. Our risk set includes 1,209 women who experienced a separation in

---

<sup>1</sup> We ran analyses controlling for the origin state (being unemployed or inactive), but this did not have a significant effect, nor did it influence our estimates. Hence, we decided not to include the origin state in our models.

<sup>2</sup> We do not differentiate between changes within the same job and changes due to a job change. This is an interesting research question in itself which should be answered in future research.

<sup>3</sup> Hence, for later changes the reference point is not  $t_0$  but can be any year between  $t_1$  to  $t_6$ .

the panel period and who worked before separation.<sup>4</sup> Observations are censored in 2001 or when women leave the panel.

In all analyses, we correct the standard errors of the macro-level effects for within-country correlation using the cluster option in STATA.<sup>5</sup> We take potentially spurious effects of cross-national differences in culture into account in so far as possible. An important factor may be gender role values: Countries with more liberal gender role values generally have higher levels of institutional support than countries with traditional sex role values (Uunk et al., 2005), and it can be expected that more liberal gender role values in a country increase the labour supply of separated women.

### **3.4 Operationalization**

#### *3.4.1 Dependent variables*

We measure employment status (employed or not) from the question addressed to respondents whether “they were working at present in a job or business normally involving at least 15 hours of work a week”. Working hours are derived from the question: “How many hours per week do you normally work in your main job or business?” We truncate working hours greater than 60 per week. To eliminate measurement error and incidental changes in hours, we define an increase/decrease in hours as an increase/decrease of at least 4 hours. A shortcoming of the ECHP data is that women working less than 15 hours a week reported the total numbers of hours they worked for pay, only if they considered working as their main activity. Moreover, the working hours of small jobs were not asked in the first two waves. Therefore, we consider women who worked less than 15 hours a week as not working and women working 15 hours and more as working. Due to this omission in the data, the average number of working hours for working women will be overestimated and the changes in hours underestimated. Inclusion of women with small jobs is not an option because that would introduce greater bias due to missing information on hours in the first two waves (which is more often the pre-divorce period). In addition, women with a small job reporting that their main activity is working will be a selective group.

---

<sup>4</sup> The number of cases is different in descriptive analyses (Table 1) because these analyses only include women at  $t_{-1}$ ,  $t_0$ , and  $t_1$ .

<sup>5</sup> We also ran multilevel analyses using the xlogit method in STATA. These analyses gave similar results.

### 3.4.2 Independent individual-level variables

The *pre-divorce income of the ex-partner* is measured by the disposable income of the household in the calendar year before separation (asked for at wave  $t_{-1}$ ) minus the disposable income of the wife before separation. Disposable income is the total income from labour, capital transfers, private transfers and social transfers, minus negative transfers like taxes, social security contributions and paid alimony. We could not use income of the ex-partner directly because we do not have this information for all respondents. The incomes are corrected for the modified OECD equivalence scale, inflation and cross-national differences in price levels. We measure ex-partner's pre-divorce income in income quartiles to account for non-linearity in the income effect. The lowest income quartile is a proxy for *pre-divorce low income*. *Post-divorce other income sources* contain capital income, property/rental income, and private transfers (including alimony) in the calendar year after divorce (asked for at wave  $t_1$ ). *Repartnering* is defined as the transition from not living as a couple in one wave to living together with a new partner in the subsequent wave. The *post-separation living situation* of women is a dichotomous variable: 0. not living with adult family; 1. living with parent(s), grandparent(s) and/or adult sibling(s). *Education* is measured as the highest level of education achieved in the wave before separation ( $t_{-1}$ ): 1. Less than second stage of secondary education (ISCED 0-2); 2. second stage of secondary education (ISCED 3) and those still at school; 3. university degree or comparable level (ISCED 5-7). *Labour market experience during marriage* ( $t_{-1}$ ) is measured differently for the two analyses. In the analysis of employment entry for non-employed women, labour market experience before separation is measured as the *duration not-working*, that is, the number of years women did not work after their last job. The longer ago it was that women left their last job, the less experience they will have. This variable is derived from a retrospective question about the last job (period 1980-2001). In the analysis of working hours for employed women, we use the *duration working*, that is, the number of years between the year women began their working life and the year before separation ( $t_{-1}$ ). We use a retrospective question about the first job to measure this variable. *Post-divorce health* is measured by the following question: 'How is your health in general?'. Respondents could answer in five categories: 1. 'very good', 2. 'good', 3. 'fair', 4. 'bad', 5. 'very bad'. We recoded the variable so that a high score means a good health. The *age of the youngest child* in the household after separation is a time-varying trichotomous variable: 0. no children; 1. the youngest child is under 6 years old; 2. the youngest child is 7 through 15 years old. *Age at divorce* ( $t_0$ ) (centred) is used as a control variable.

### 3.4.3 Independent macro-level variables

The *income-related state provision* of a country is measured by the legislative guaranteed monthly net allowance for single parent families with one child of ten years old, in the period 1996-2001. This annual measure (in purchasing power parities (PPP)) is the sum of three allowances (if present in the country): 1. basic allowance for welfare dependency; 2. single parent allowance; 3. child allowance. A country's *employment-related state provision* is measured by the number of available public childcare places per 100 children under age three in publicly funded day care services in 1993 and 2000. Fully time-varying information is not available.

Although these institutional measures refer to (divorced) mothers only, we believe they are good proxy's for institutional support for all (divorced) women, including women without residing children. The public childcare measure is an indicator for women-friendly policies in general, considering its high correlation with other employment indicators such as maternity leave and the size of the public service sector (Mandel & Semyonov, 2006). The measure of single parent allowances correlates highly with the general level of social assistance (Van Damme & Uunk, forthcoming).

To control for differences in the labour market situation, we include the female unemployment rate and the incidence of female part-time work in a country. The standardized *female unemployment rate* is the number of unemployed women as a percentage of the total female labour force. The annual data are obtained from the OECD, are comparable over time, and conform the guidelines of the International Labour Office (OECD, 2006b). The share of *female part-time employment* is the percentage of employed women who usually work less than 30 hours per week in their main job. Data include only women declaring usual hours (OECD, 2006b). For the measurement of the *gender role values* we draw on data of the European Values Study 1990/1999, a large-scale, cross-national, and longitudinal survey on moral and social values (EVS, 1981/90/99). We use a scale of attitudes towards the housewife role. High scores indicate more egalitarian gender role values, low scores a more traditional view (see Kalmijn, 2003 for more details on the measurement of this variable).

### 3.5 Results

#### 3.5.1. Institutional variation

We find considerable country variation in the levels of social welfare and public childcare provision (Table 3.1). In Denmark, Belgium, and the United Kingdom, single parent allowances are high. In Portugal, Spain, and Greece, allowances are up to a factor 4 lower. The ranking of public childcare provisions is somewhat different. State arrangements on childcare are most generous in Denmark, Finland, Belgium, and France. Portugal provides a moderate level of public childcare, whereas the other countries have a lower public childcare ratio. The two institutions show considerable overlap (Pearson  $r$  on country level = 0.56;  $p < 0.05$ ), yet they do not coincide perfectly so that the independent effect of each institution can be measured.

Table 3.1  
Level of net guaranteed monthly single parent allowance (1996 prices) and the number of public childcare places per 100 children under age three of 13 EU-countries, 1993-2001

	Single parent benefit 1995 <sup>b</sup>	Single parent benefit 1996 <sup>a</sup>	Single parent benefit 1997 <sup>a</sup>	Single parent benefit 1998 <sup>a</sup>	Single parent benefit 1999 <sup>a</sup>	Single parent benefit 2000 <sup>a</sup>	Single parent benefit 2001 <sup>a</sup>	Public child care 1993 <sup>c</sup>	Public child care 1998-2000 <sup>d,e</sup>
Denmark	686	854	796	819	1174 <sup>i</sup>	1266 <sup>i</sup>	1149 <sup>i</sup>	50	64
United Kingdom	662	775	773	756	786	834	1076	2	2 (34)
Belgium	793	800	808	803	785	797	834	30	30
Netherlands	675	654	681	699	698	710	651	8	6
Austria <sup>f</sup>	532	574	525	539	573	585	599	3	4
Germany <sup>f</sup>	549	553	563	560	505	524	587	4	9
France	473	487	510	534	541	561	579	23	26
Ireland	477	482	502	498	470	453	546	2	2 (15)
Finland	481	492	475	471	466	485	481	27	22
Italy <sup>f</sup>	516	502	486	479	482	459	433	6	6
Portugal	217	223 <sup>h</sup>	226	234	241	248	246	12	12
Spain	229	225	218	206	205	198	194	5	5
Greece <sup>g</sup>	229	225	218	206	205	198	194	3	3

<sup>a</sup> Source: Mutual Information System on Social Protection (MISSOC), European Commission (1997, 2002).

<sup>b</sup> Imputed by first author using country-specific linear interpolation.

<sup>c</sup> Source: Tietze & Cryer (1999).

<sup>d</sup> Source: OECD (2001); for France, Germany, Ireland, and Italy: OECD (2006a).

<sup>e</sup> Both public and private provisions. Ireland, the United Kingdom, and the Netherlands rely mainly on commercial private sector provision of formal child-care services for children under 3 (OECD, 2001). Especially the values for the United Kingdom and Ireland are striking. Therefore, we used the values of 1993 for these countries in our analyses.

<sup>f</sup> National average of regionally different allowances.

<sup>g</sup> No general social security schemes. We assume the allowance level is equal to the benefit level in Spain

<sup>h</sup> Imputed by first author using country-specific linear interpolation.

<sup>i</sup> The shift between 1998 and 1999 is due to different calculations. Until 1998 no specific example for allowances for single parents was provided in MISSOC, hence it was calculated as the sum of single person allowances and child allowances. From 1999 onwards, Denmark provided the exact amount to which single parents were entitled.

### 3.5.2 Descriptive analyses

To what extent do European women change their employment after separation? On the aggregate, we observe a significant, but small general increase in employment from 63 percent before divorce to 68 percent after divorce, an 8.7 percent increase (Table 3.2). However, the change varies substantially among the countries investigated. In most countries, especially the Netherlands, Denmark, and Italy, participation rates in the year after separation significantly increase, whereas in the United Kingdom --just as Jenkins (2008) found-- the rates decrease. We do not observe a significant change in Ireland, Austria, Finland, and Greece. This country pattern coincides with the participation rates before divorce: Increases in employment are greatest for those countries in which women worked least before divorce. This is evidenced by the negative correlation between the employment rate before separation and the changes in employment after separation (country level  $r = -0.48$ ;  $p < 0.05$ ).

The general increase in employment suggests a positive effect of separation. However, women may anticipate a divorce and increase their employment already before the separation or may be more economic independent to begin with. Indeed, as Table 3.2 shows, separated women are a selective group: On average they are more often employed than married women. The difference in employment rates is especially high in the southern European countries (except for Portugal).

Table 3.2 furthermore shows entry and exit rates and changes in working hours for separated women. Of the women who were not working before separation, 36 percent enter the labour market in the first year after divorce. Half of the pre-divorce working women change their employment after separation: 20 percent increase their working hours, 17 percent decrease and 13 percent exit the labour market. Again, we find country variation in these figures. Entry occurs most in Denmark, Germany, France, and Greece. In these countries about half of the pre-divorce non-working women enter in the year after divorce. The entry rate is lowest in the United Kingdom and Ireland, where one out of five women enter. The increase in working hours is particularly high in the Netherlands. This might be explained by the large availability of part-time work in the Netherlands, but it may also reflect a ceiling effect: In countries where women work few hours before separation an increase in labour supply is easier than in countries where women work many hours before separation. A decrease in working hours happens most often in the United Kingdom and the southern European countries (except Greece). Exit rates are high in Greece and Ireland. Working women in Denmark and Italy are the most stable (over 60 percent do not change



their working hours), whereas the majority of women in the United Kingdom, Greece and Ireland experience a change (around 60 percent change their working hours).

Table 3.2  
The employment of separated and married women in 13 EU-countries

The employment of separated and married women in 15 EC countries									N <sup>a</sup>
Employment rate women				Percentage separated women that change employment					
Separated		Married		Entry <sup>d</sup>	Increase <sup>e</sup>	Decrease <sup>e</sup>	Exit <sup>e</sup>		
Before split-up <sup>b</sup>	After split-up <sup>c</sup>	Net change							
Netherlands	53.1	65.0	11.9**	46.8	34.9	29.8	13.8	8.5	177
Denmark	64.5	76.3	11.8**	79.7	57.4	12.2	9.2	13.3	152
Italy	61.9	73.3	11.4**	42.3	32.5	16.9	20.0	1.5	105
Portugal	58.6	67.7	9.1**	60.6	34.1	17.2	20.7	8.6	99
France	54.4	63.3	8.9*	56.2	43.1	17.4	15.1	19.8	158
Belgium	56.3	64.7	8.4*	62.3	32.7	22.4	19.4	10.5	119
Spain	56.1	64.4	8.3*	34.7	34.5	21.6	21.6	12.2	132
Germany	68.7	76.0	7.3**	54.8	46.5	19.1	16.4	10.6	275
Ireland	41.3	45.7	4.3	41.3	22.2	21.1	15.8	21.1	46
Austria <sup>f</sup>	73.6	75.5	1.9	55.7	32.1	19.2	14.1	9.0	106
Finland <sup>g</sup>	77.2	75.6	-1.6	76.3	32.1	19.0	17.9	11.6	123
Greece	65.4	63.5	-1.9	43.4	44.4	14.7	17.7	26.5	52
United Kingdom	67.4	62.5	-4.9*	63.1	20.2	23.9	22.0	17.1	304
Total	62.9	68.3	5.5**	51.8	36.0	20.1	17.4	12.6	1848

\*  $P < 0.05$ ; \*\*  $P < 0.01$ ; (t-test of pairs).

<sup>a</sup> Number of separated women.

<sup>b</sup> Measured in the wave before the split-up (t-1).

<sup>c</sup> Measured in the wave after the split-up (t1).

<sup>d</sup> Only women who were not working before the separation (or with a job < 14 hours) (N = 686).

<sup>e</sup> Only women who were working before the separation (with a job > 14 hours) (N = 1162).

<sup>f</sup> For Austria only information for 1995-2001 is available.

<sup>g</sup> The Finnish survey has only 6 waves (1996-2001).

Source: ECHP, 1994-2001 (own calculations)

### 3.5.3 Multivariate analyses of employment entry

In Table 3.3 we estimate the odds of employment entry after separation for women who did not work before separation. Model 1 displays that characteristics measuring financial incentives do not matter much for employment entry. Ex-partner's income does not have a significant effect on women's post-separation odds of employment. Nevertheless, the U-shaped direction of the effect is in line with our expectation: The entry odds decrease from the 'poorest' 1<sup>st</sup> income quartile to the 2<sup>nd</sup> quartile and 3<sup>rd</sup> quartile, and increase for the 4<sup>th</sup> income quartile. Co-residence with adult family and repartnering do not significantly affect women's employment odds. However, additional analyses show that in countries with low income support (for example, Greece and Spain in 2001) co-residence with parent(s) or other adult relatives and repartnering do play the expected role: In these countries, repartnered women ( $b = -1.27$ ,  $p < 0.05$ ) and women living with adult family ( $b = -0.72$ ,  $p < 0.01$ ) are

less likely to enter the labour market than non-repartnered women and women not living with adult family respectively; In countries with high income support (for example, Denmark in 2000), the effect of repartnering ( $b = 0.90$ ) and living with adult family ( $b = 1.39$ ) is positive. An unexpected finding from Model 1 is that women with income from capital, property, and private transfers are more likely to enter the labour market than women without these income sources. The reason may be that women with any kind of income may not be eligible for welfare – welfare payments are often means-tested – and thus have to work to earn a living.

In contrast to financial incentives, individual resources and restrictions do matter for divorced women's entry odds. The more human capital resources women have accumulated before divorce, the more likely they enter employment after divorce, as evidenced by the negative effect of duration not-working and the positive effect of education. Women's post-divorce employment is also constrained by health, children and age. The worse their health after separation, the lower women's employment odds after union dissolution. The younger the children living in the household after split-up, the lower the probability that women start working. Women with children under age six are [ $\exp(-0.76)$ ] 53 percent less likely and women with children between 7 and 15 years are [ $\exp(-0.40)$ ] 33 percent less likely to enter the labour market than women without children. A woman's age has a non-linear influence with a turning point at age 32. Up to 32, older women are more likely to enter. As from 32 the effect is negative and this effect increases with age. Hence, the older separated women are, the more difficult it is to enter the labour market, and this restriction becomes more important at older ages. Note that this effect is net of the effects of the experience measure. This suggests that separation at older ages is financially more harmful for women than separation at younger ages. An additional interesting finding concerns the effect of divorce duration. Women are most likely to enter the labour market in the year *of* separation. In the next three years the odds decrease. This indicates that the decision to start working is very soon after separation. The late rise in employment odds four years after separation has to be interpreted carefully because of the low number of cases (due to attrition and right censoring).

Model 1 estimates in addition to individual-level effects, effects of institutional characteristics. As hypothesized, income-related institutions have a negative effect on separated women's odds of employment. An increase of 100 PPP in allowances is associated with a decrease in the entry odds of 7 percent [ $\exp(-0.072)$ ]. Also in line with our predictions is the effect of public childcare: The more generous public childcare provisions are, the more likely women start working after divorce. An increase of one public childcare place is

associated with an increase of  $[\exp(0.014)]$  1.4 percent in the odds of entry. Comparing the two indicators, the effect of public childcare is somewhat larger than the effect of income support: Per standard deviation, the effect of public childcare is 0.22, whereas the effect of income support is 0.17. These institutional effects can only partly be attributed to country differences in the labour market and gender role values. Model 1 shows that the female unemployment rate does not influence the entry odds. Adding the unemployment rate to the model only slightly increased the effect of childcare. However, the effect of single parent allowances increased with 57 percent. Hence, the unemployment rate suppressed the effect of single parent allowances (country level  $r_{\text{unemployment, allowances}} = -0.55$ ). Model 2 displays that the effect of gender role values is not significant either. Adding gender role values to the model did not change the effect of childcare, but the effect of single parent allowances – although still significant – declined with 26 percent. Part of the initial effect of social welfare is therefore spurious; it is due to cross-national differences in culture (country level  $r_{\text{gender role values, allowances}} = 0.37$ ).

The last two models of Table 3.3 estimate cross-level interactions. Model 3 tests the interaction of single parent allowances with a dummy for the ex-partner's lowest income quartile. In line with our expectations, the interaction effect is negative – although borderline significant ( $p=0.09$ ).<sup>6</sup> The higher the level of social welfare, the less positive the effect of having had a low income partner on post-divorce employment entry. For example, in countries with the lowest income support (194 PPP/100; see Table 3.1), women with a low income ex-partner are about 1.5 times *more* likely to enter the labour market than women with a more affluent ex-partner of the 2<sup>nd</sup> income quartile  $[\exp(+0.63-0.10*1.94)]$ . In high income support countries (1266 PPP/100) women with a low income ex-partner are *less* likely to enter the labour market than women with a former partner of the 2<sup>nd</sup> income quartile; their odds are about 47 percent lower  $[\exp(+0.63-0.10*12.66)]$ . The lower entry odds for women from previously 'poor' households in high-spending countries may be interpreted in terms of a weaker economic need to work.

Model 4 tests the interaction of public childcare provision with the age of children. As hypothesized, we find that especially women with young children benefit from employment-related state provisions ( $p = 0.07$ ). In countries with the lowest level of childcare provision (2 childcare places per 100 children), women with young children are about three times less likely to start working than childless women  $[\exp(-0.96+0.013*2)=0.39]$ . In

---

<sup>6</sup> We have to note that these models cope with a small number of degrees of freedom. Considering the large differences in entry odds between distinct levels of institutional support, we believe that these cross-level interactions – although not statistically significant – are substantial.

countries with the most generous childcare provision (64 childcare places per 100 children), women with young children are only 15 percent less likely to start working than childless women [ $\exp(-0.96+0.013*64)=0.88$ ]. This means that the restriction of having young children is almost taken away in countries with generous public childcare provisions.

Table 3.3  
Event history analyses of the odds of entry into employment for non-working separated women

	Model 1	Model 2	Model 3	Model 4
Married (before separation)	0.176	0.165	0.163	0.183
Still at school (before separation)	-0.654*	-0.617	-0.688*	-0.639*
Income ex-partner (before separation), 2 <sup>nd</sup> quartile	-0.052	-0.057	-0.626	-0.047
Income ex-partner (before separation), 3 <sup>rd</sup> quartile	-0.001	-0.017	-0.590	-0.005
Income ex-partner (before separation), 4 <sup>th</sup> (top) quartile	0.140	0.130	-0.451	0.133
Income from capital, property, and private transfers	0.042*	0.042*	0.041*	0.042*
Living with adult family	-0.132	-0.149	-0.153	-0.173
Repartnered	-0.287	-0.300	-0.299	-0.299
Middle education (before separation)	0.261*	0.252*	0.258*	0.247*
High education (before separation)	0.203	0.194	0.198	0.181
Duration not working (before separation)	-0.061***	-0.060***	-0.061***	-0.062***
Health	0.297***	0.293***	0.294***	0.291***
Child 0-6 years	-0.764***	-0.758***	-0.762***	-0.956***
Child 7-15 years	-0.399*	-0.398*	-0.394*	-0.450*
Age at divorce (centred)	-0.005	-0.004	-0.005	-0.005
Age at divorce (centred) <sup>2</sup>	-0.004***	-0.004***	-0.004***	-0.004***
1 Year after separation	-0.468**	-0.457**	-0.454**	-0.460**
2 Years after separation	-0.589**	-0.575**	-0.578**	-0.576**
3 Years after separation	-0.812***	-0.790**	-0.794**	-0.804**
4 Years after separation	0.111	0.138	0.134	0.115
5 Years after separation	-0.126	-0.098	-0.136	-0.106
6 Years after separation	-0.713	-0.695	-0.665	-0.689
Single parent allowance (/100)	-0.072*	-0.053*	-0.018	-0.039
Public childcare provisions	0.014***	0.012***	0.011***	0.007*
Female unemployment rate	-0.017			
Egalitarian gender roles		0.406		
Allowance*1 <sup>st</sup> income quartile ex-partner			-0.102	
Care*child 0-6				0.013
Care*child 7-15				0.001
Constant	-0.986*	-2.217	-0.837*	-1.206**
McFadden's R <sup>2</sup>	0.110***	0.109***	0.111***	0.110***

\*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ , one-tailed tested; standard errors corrected for clustering of individuals within countries.

Number of separations: 659, number of events: 375, number of person years: 1626.

Source: ECHP, 1994-2001 (own calculations)

### 3.5.4 Multivariate analyses of changes in working hours

In the second set of multivariate analyses we estimate the impact of individual and institutional factors on changes in women's working hours after split-up. Table 3.4 shows that financial incentive measures do affect women's labour supply after divorce, but inconsistently. We find a U-shaped effect of pre-divorce partner's income on the odds to

*increase* post-divorce hours, yet we also found this effect on the odds to *decrease* hours. Moreover, women from previously poor households are less likely to exit employment, but they are also more likely to decrease their working hours. Again, this is inconsistent evidence for the fact that women who had a partner with a low income before divorce experience an incentive to work. Additional analyses show that these income effects do not differ between countries with low and high social welfare benefits.

Alternative income sources matter more for working women's post-divorce labour supply. Table 3.4 shows that repartnered women have higher odds of decreasing their working hours and exiting employment than non-repartnered women. This is in line with our hypotheses. Women who are living with adult family after divorce are more likely to exit from employment than to change their working hours (according to the Wald test in Table 3.4 differences between the coefficients of increase/decrease versus exit are significant). A plausible explanation for this finding may be the kind of support women receive from their parents. Living with parents who provide financial support increases the likelihood to exit, while relying on parents for informal child care increases the likelihood to continue working. Table 3.4 also shows that – conform our expectation – women with income from capital, property or private transfers are more likely to decrease their working hours.

Human capital resources and time and health restrictions affect working women's labour supply after separation as well. The lower the educational category, the less likely women increase their working hours, and the more likely they exit employment. The poorer the health, the more likely women decrease working hours and exit employment. Moreover, the younger the age category of the children in the household, the more likely women exit the labour market. The positive effect of education on the odds to decrease and the negative effect of health on the odds to increase are unexpected, however. Woman's age at divorce has a U-shaped effect (peak at age 37): Age has a negative effect on employment exit until age 37; from then onwards, exit becomes increasingly more likely than stability or change. Divorce duration also has a significant effect: The longer the separation ago, the higher the odds of exit.

The effects of institutional factors on changes in working hours are weaker and less in line with our expectations than the institutional effects on labour market entry. Table 3.4 shows that more public childcare does not protect against employment exit (insignificant effect) and does not encourage increases in working hours (small negative effect). Yet, it does slightly protect against decreases in working hours: The more public childcare, the lower the odds that working women decrease working hours. Although single parent allowances lower

the odds of employment entry (Table 3.3), Table 3.4 shows that they do not affect the odds of exit.<sup>7</sup> Controlling for the availability of part-time work or gender role values (not in table) hardly changes the effects of institutions. Interestingly, availability of part-time work appears to have a positive effect on decreases in working hours, and no effect on increases in hours. More part-time work gives separated, working women the opportunity to reduce working hours.

Table 3.4

Event history analyses of the odds of an increase or decrease in weekly working hours or exit (reference category: stability) for women who were working before the separation

	Increase	Decrease	Exit	Wald-test coefficients
Pre-separation working hours	-0.025***	0.035***	-0.021***	***
Married (before separation)	0.059	0.068	-0.321**	**
Income ex-partner (before separation), 2 <sup>nd</sup> quartile	-0.334**	-0.407**	0.252*	***
Income ex-partner (before separation), 3 <sup>rd</sup> quartile	-0.322**	-0.424***	-0.033	
Income ex-partner (before separation), 4 <sup>th</sup> (top) quartile	-0.036	-0.157	0.080	
Income from capital, property, and private transfers	-0.002	0.027*	-0.019	
Living with adult family	-0.147	-0.200	0.334*	*
Repartnered	0.187	0.233*	0.371**	
Middle education (before separation)	-0.125	-0.053	-0.402***	*
High education (before separation)	0.231*	0.236*	-0.639***	***
Labour market experience (before separation)	0.009	-0.008	0.001	
Health	-0.150**	-0.177***	-0.562***	***
Child 0-6 years	-0.195	0.133	1.244***	***
Child 7-15 years	0.132	0.203	0.587***	*
Age at divorce (centred)	-0.031**	-0.003	-0.008	
Age at divorce (centred) <sup>2</sup>	-0.000	0.001	0.004***	***
1 Year after separation	0.031	-0.344**	0.159	*
2 Years after separation	-0.087	-0.006	0.329*	
3 Years after separation	-0.032	-0.267*	0.466***	***
Single parent allowance (/100)	-	-	0.040	
Public childcare provisions	-0.008*	-0.007*	-0.003	
Female part-time employment	0.004	0.014***	-0.007	***
Constant	0.381	-2.137***	0.776*	***
McFadden's R <sup>2</sup>		0.059***		

\*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ , one-tailed tested; standard errors corrected for clustering of individuals within countries.

Number of separations: 1,209, number of events: 1,997 (794 increases; 602 decreases; 601 exits), number of person years: 4,380.

Source: ECHP, 1994-2001 (own calculations)

Additional support for our hypothesis on the effect of employment-related institutions is found in the interactive effect of public childcare and the age of the youngest child (not in table). The more public childcare places available, the less positive the effect of children on working women's odds of decreasing hours or exiting employment. For example, in countries

<sup>7</sup> We do not include single parent allowances as a predictor of increase or decrease in hours because we do not expect to find an effect here (nor do we have a theoretical explanation for such an effect).

with hardly any childcare places separated women with a child under age six are about 27 percent [ $\exp(0.26-0.011*2)$  ,  $p = 0.10$ ] more likely to reduce their working hours and almost 5 times [ $\exp(1.60-0.023*2)$  ,  $p < 0.05$ ] more likely to exit than childless women. Conversely, in countries with ample childcare arrangements this negative effect is cancelled out: The odds of a decrease or exit for women with a young child are 0.64 [ $\exp(0.26-0.011*64)$ ] and 1.14 [ $\exp(1.60-0.023*64)$ ], respectively (see note 6). Hence, more public childcare provisions seem to take away the time restrictions children bring about.

### **3.6 Conclusion and discussion**

Our first conclusion is that on average European women only modestly increase their employment after separation. The employment rate before separation is almost 63 percent and after separation 68 percent, an increase of 8.7 percent. Of the women who were not working before separation 36 percent enter the labour market one year after separation. Moreover, half of the women who were working before separation change their working hours, yet the share of increases in hours is lower than the total share of decreases and employment exits. These patterns differ to a large extent between countries: In the Netherlands, for example, divorced women strongly increase their labour supply (especially the number of hours), whereas in the United Kingdom women show an overall decrease.

Our second conclusion refers to individual determinants of employment. We find weak and inconsistent support for the influence of financial incentives. There is no clear effect of the partner's income before the divorce on women's employment after divorce. However, the effects of alternative income resources are in line with our expectations. Repartnering and co-residence with adult family negatively affect women's odds of entry in countries with low single parent allowances. Moreover, repartnering and co-residence with adult family increases the chance that working women exit employment. Furthermore, we find that women with income from capital, property, and private transfers are more likely to decrease their working hours, but also more likely to enter the labour market than women without these income sources. This might be due to the fact that non-working women with any kind of income are not eligible for welfare. Our analyses also reveal that less human capital investments during marriage, poor health and having young children lead to lower chances to increase employment after separation. Although similar findings have been found

regarding the employment of women (or mothers) in general, these findings are fairly new to the literature on divorce.

The third conclusion is that public policy matters for changes in women's employment after union dissolution, albeit not in a simple way. Employment-related institutions encourage women's employment as is evidenced by the positive effect of public childcare on the employment odds for non-working women and the negative effect of public childcare on the odds to decrease working hours for employed women. Both effects are especially pronounced for women with young children. Public childcare provisions also lower the odds of employment exit for women with young children, but not for other women. Public childcare arrangements seem to do what they were intended for: Take away time restrictions to enable women to work for pay. However, income-related institutional arrangements (single parent allowances) discourage separated women's employment, as is evidenced by the negative effect on the odds of employment entry for non-working women. Although it has been found that higher levels of single parent allowances improve the financial situation of separated women (Uunk, 2004), social welfare worsens women's employment after separation. Probably, social welfare decreases financial loss after divorce and increases the reservation wage. Both reduce the financial incentives to work. Some women may be even better able to make ends meet on welfare, because of the loss of welfare specific benefits when employed. These opposing institutional effects demonstrate that welfare states should not only focus on providing income support, but simultaneously facilitate the employment of separated women.

Previous research showed that institutions like childcare affect female employment in general and of mothers in particular. Our results underline that institutions also affect the employment decisions of women after important life events like divorce. Institutions facilitate the combination of work and care for children for single parents. Hence, single parents are more likely to increase their employment and be less dependent on welfare. We note, however, that the institutional factors mainly affect labour market entry, and to a weaker extent changes in working hours or exit of women. The weaker institutional effects on changes in hours (including exit) could be due to the way hours are measured (only of the main job, and small jobs of less than 15 hours are not considered). However, it is difficult to predict to what extent and in which direction our estimates might be biased. Future research should investigate this more carefully, but with the ECHP data this cannot be examined. An alternative, more theoretical interpretation of the weak institutional effects on changes in hours is that institutions are able to pull non-working separated women to the labour market,



but less able to influence women when they are at work. Why this is so, is also an interesting subject to investigate in future research.

Finally, we make some suggestions for future research. We contributed to the existing research by examining the influence of public child care provisions and single parent allowances on the labour supply consequences of divorce for women. But other institutional arrangements, like alimony systems, could play a role as well. In countries where women receive high amounts of alimony or child maintenance, women may be less forced to increase their employment after divorce. Future research can address measures of alimony systems across countries and their effect on the financial and labour market position of women. Further research may also examine matters of endogeneity and unravel the recursive relationships between on the one hand women's post-separation employment, and on the other hand repartnering and living arrangements. Longer longitudinal panel data could solve these problems, but at the price of drastically reducing the number of countries.

## **Chapter 4**

### **The Dynamic Relationships Between Union Dissolution and Women's Employment: A Life History Analysis of 17 Countries**

#### **Abstract**

Women's work is generally considered an important factor explaining the risk of divorce. The specialization theory from Gary Becker is often used to explain this work effect. The main argument is that women with little work experience have higher economic costs to exit marriage. Using the Fertility and Family Surveys, we test for 17 countries to what extent women's employment increases the risk of separation. We also more directly examine the role of economic exit costs in separation by investigating the effect of separated women's work history during the union on women's post-separation employment. The results imply that Becker was right to some extent: Women's employment increases the risk to separate and separated women's work history increases their post-separation working hours. However, Becker's theory also appears to have less explanatory power in countries where gender roles are more equal. Hence, the theory appears to be true under specific societal conditions.

## 4.1 Introduction

Several scholars have found that the more women engage in domestic work and the less they participate in paid labour during their partnership the lower their risk of divorce (e.g., Bracher et al., 1993; Brines & Joyner, 1999; Cherlin, 1979; Poortman & Kalmijn, 2002; Rogers, 2004; South, 2001; Tzeng & Mare, 1995). This effect is generally attributed to the higher economic exit costs of married women who were not specializing in paid work in the union. The less women work for pay during the union, the more their human capital depreciates, and the fewer economic resources they will have outside the union. Moreover, specialization is assumed to lead to higher economic gains of the partnership for both men and women, and therefore also results in higher economic costs when the union dissolves (Becker, 1981). Although this reasoning is often used as an interpretation, it is rarely empirically tested. Do women who separate indeed have better economic resources, and thereby, higher employment probabilities after separation? And do women who invested more in paid work during the partnership indeed have better employment chances after separation? By asking these questions we combine two lines of research: Research on the economic causes of divorce and research on the economic consequences of divorce. Scholars have investigated the effect of women's employment within marriage on the divorce risk as well as the effect of divorce on women's post-divorce employment (e.g., Covizzi, 2008; Jenkins, 2008; Van Damme, Kalmijn & Uunk, 2009). So far, no study has combined the two lines of research into one study.

To address these issues, we use the retrospective data of the Fertility and Family Surveys (FFS) of 17 countries. The data of these countries have life histories of about 67,000 women covering 20 years of history on average. We analyze 50,790 women who married or cohabited in the period 1955-1999. Of these partnered women, 25 per cent separated at least once in the period 1957-1999. We examine three relationships (see Figure 4.1). First, we examine the effect of women's employment on the chance that women separate. Second, we investigate to what extent women who separate work more hours after separation than before. Third, we examine if separated women's work history during the union leads to more post-separation working hours. In examining this last issue, we take into account that the women who separate are a selective group (see below).

The relationships between union dissolution and women's employment are analyzed for 17 European countries. This not only will provide more general evidence on the validity of the underlying hypotheses, it also allows us to examine whether there are systematic

differences among countries. Such differences can in part be expected because there are large differences in women's economic roles in the various European countries (Blossfeld & Hofmeister, 2006; Stier, Lewin-Epstein & Braun, 2001). In Southern European countries, few married women work for pay and the division of labour in the home is traditional. In Northern European countries, most married women work for pay and gender roles are egalitarian. In Eastern European countries, employment is also common among married women but gender roles are traditional. Our general expectation is that the economic exit costs of marriage are lower in more egalitarian countries. From this idea, we derive the hypotheses that the effect of women's employment on union dissolution and the effect of separated women's work history on post-divorce employment are weaker in more egalitarian countries. We test these hypotheses using multilevel regression techniques and graphic representations of the effects in the 17 countries.

## 4.2 Theory and hypotheses

To what extent is the underlying theoretical mechanism explaining the relationship between women's employment and separation empirically valid? That is, do women who were working more hours during the union indeed have lower economic exit costs – they work fewer hours after separation – than non-working women? To answer this question, we discuss the three relationships presented in Figure 4.1.

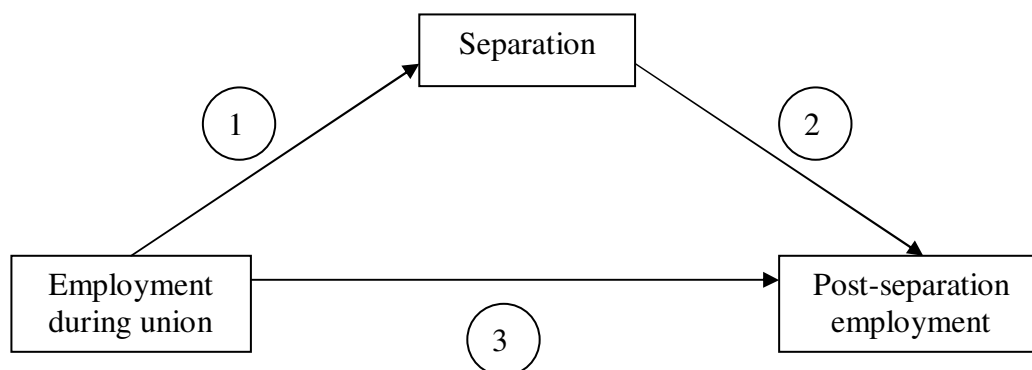


Figure 4.1  
Conceptual model of the relationships between women's employment during the union, separation, and post-separation employment. Relationship 3 is only applicable to separated women.

#### *4.2.1 The effect of women's employment on separation*

Although a few studies showed negative (e.g., Ono, 1998) or insignificant effects (e.g., Sayer & Bianchi, 2000), most studies have shown positive effects of women's employment on the chances to divorce. Poortman & Kalmijn (2002) for instance, found higher divorce risks for couples where the wife works more, has a higher job status, has more potential labour market success, and has a better labour market position compared to her husband. Many other studies have found similar results (Bracher et al., 1993; Brines & Joyner, 1999; Cherlin, 1979; De Rose, 1992; Jalovaara, 2003; Liefbroer & Dourleijn, 2006; South, 2001; Tzeng & Mare, 1995). This positive effect of women's employment on divorce is often explained from an economic perspective using the principle of specialization. Neoclassical theories of marriage assume that family members make rational decisions and that they want to maximize their utility or economic well-being. The main argument is that if couples specialize in the household tasks in which they are the most productive (compared to their partner), they maximize their income (Becker, 1981). Given that there are wage differences between men and women and given women's greater role in child rearing (Becker points to both biological and socialization differences between the genders), women are considered to be the most productive in doing domestic work, whereas men are more productive in performing paid work. Both women (and men) are thus dependent upon their spouse. Under the assumption that women are less productive in paid work than men, an increase in wives' paid working hours (while husbands do not decrease their paid working hours and start to do more household tasks) decreases marital gains and thus increases the risk of divorce. Furthermore, because women's work during marriage is less often paid market work, they have less work experience and therefore fewer economic resources outside the marriage than within compared to men (see below). Hence, for women the economic costs to exit marriage are higher than for men.

Scholars have raised some arguments against theories on the benefits of economic dependency within the household (Oppenheimer, 1997). First, specialization is a risky and inflexible family strategy, especially for the nuclear family. Unforeseen events – like unemployment or disability of the main breadwinner, or illness of the care-taker – may lead to the temporary or permanent loss of a 'specialist' in the family. This can cause a large income decline or lead to a neglect of the children. Moreover, the consumption needs of a family as well as their productive capabilities may change during the family's life-course. Second, the concept of economic dependence is rather vague; it may refer to both absolute

and relative dependence. The specialization theory focuses on relative dependency, meaning dependence upon one's partner and implies that not only wives', but also her partner's working hours or income are important in her divorce decision.<sup>1</sup> This argument relies on two assumptions, however. First, within a household all economic resources are pooled and equally shared. This is proved to be an unrealistic assumption (Vogler & Pahl, 1993): Spouses often do not pool all of their resources and because it is usually the husband who keeps more for himself, the economic dependency of wives upon their husbands is overestimated (Sørensen & McLanahan, 1987). The second assumption that can be criticized is that economic transfers between spouses necessarily create a dependency relationship. The specialization theory assumes that there is a balanced exchange between partners: The husband's market work is traded for the wives domestic work. However, the value of domestic work is worth less outside of the marriage than in it. Becker refers to these kind of investments as marital specific capital. For earning their own income on the market, women are thus more dependent upon their husband than men upon their wives. What matters more, therefore, is women's absolute economic independence: To what extent are women able to earn a living independently as an individual (even though it would be at the minimum income level). We believe that economic independence in absolute terms is measuring women's economic exit costs better than their relative economic independence and thus is the most relevant one in women's separation and employment decisions. Moreover, we analyze only women, not their male partners, and we also do not have data on the partner's income level and working hours. Because of these reasons, we focus on women's absolute economic dependence measured by her working hours. Hence, we formulate the specialization hypothesis in the following way: *The more hours women worked during the partnership, the more likely it is that they will separate (hypothesis 1a).*

Obviously, emotional and social-psychological reasons may be more important factors in women's divorce decision, outweighing the negative economic exit costs. However, given equal social-psychological costs and benefits of marriage and separation, lower economic exit costs can still remove the barrier to separate. Because the FFS does not allow us to control for relationship quality or satisfaction, our results may apply more to women exiting bad unions than to women exiting all partnerships, regardless of the quality (Sayer & Bianchi, 2000; Schoen et al., 2002).

---

<sup>1</sup> Linked to this is the income effect on separation: Couples with higher incomes are less likely to divorce. We cannot take income into account in this chapter because retrospective data rarely include good income measures.

*Country differences*

Although we expect to find the work effect in all countries, there may be differences in the magnitude of the effect which may be caused by differences in the (actual and perceived) economic costs of partnership. It is well-known that in some countries, the trend towards gender egalitarianism has occurred more quickly and more strongly than in other countries. For instance, in the last decades of the previous century, women's employment rate increased, and more generous family supportive policies – like public child care provisions and parental leave – facilitate the combination of work and care for women in many industrial societies. These processes contribute to greater economic gender equality (England, 2005; Oppenheimer, 1994, 1997; Orloff, 1993).

Economic gender equality may reduce the economic exit costs of marriage in a society because more employment opportunities for women and institutional arrangements supporting women's work may facilitate finding a job after separation (South, 2001) and reduce barriers to increase working hours after union dissolution (Van Damme et al., 2009). This may not only lead to lower *actual* economic costs, but also to lower *expected* costs (as perceived by partnered women). Even partnered women who did not work during the union may expect to find a paid job to compensate their income loss in the event that they separate. Hence, the effect of employment on union dissolution is expected to be smaller in more gender egalitarian countries; all women – also those who were primarily involved in domestic labour during the partnership – are more likely to divorce or separate. In sum: *The higher the degree of gender equality in a country, the less positive the effect of employment on separation is (hypotheses 1b).*

*4.2.2 The effect of separation on employment*

Do women who separate indeed have better economic resources, thus work more hours after separation? Most studies have found a positive relationship between divorce or separation and post-divorce employment (Bouman, 2005; Bradbury & Katz, 2002; Duncan & Hoffman, 1985; Finnie, 1993; Haurin, 1989; Johnson & Skinner, 1986; Peterson, 1989; Van Damme et al., 2009), although some studies found no effect for Canadian women (Mueller, 2005) or a negative effect for British women (Jenkins, 2008). An increase in post-separation employment is typically explained in terms of financial needs. A separation implies a financial cutback for women because of the loss of economies of scale and insufficient alimony payments. Especially in traditional male-breadwinner type households, women have

no own income source (yet) and can no longer rely on their spouse's income after the split up. Women may compensate this drop in adjusted household income after separation through an increase in employment. That some studies find no or a negative effect may be explained by women's alternative income sources. Some women may receive welfare or sufficient alimony after divorce and thus do not need to work. Others may remarry quickly (Duncan & Hoffman, 1985) or move in with their parents (Smock, 1993), which may also reduce their need to work. We formulate the following hypothesis: *After separation women will increase their working hours (hypothesis 2a).*

We expect that the separation effect will be stronger in more gender equal countries because in such countries women have more employment opportunities and it is easier to combine work and care due to ample institutional arrangements like public child care provisions and parental leave. Thus, we hypothesize that: *The higher the degree of gender equality in a country, the more positive the separation effect on women's working hours is (hypotheses 2b).*

#### 4.2.3 The effect of women's employment during the union on post-separation employment

In the literature, the positive influence of wife's work during marriage on women's post-divorce employment is suggested to be the underlying reason for the effect of wife's work on divorce. Working fewer hours during the union may have a negative influence on women's post-divorce employment because investments in domestic work rather than in paid work lead to a depreciation of human capital (Blossfeld & Huinink, 1991), which in turn reduces women's employment after divorce (Johnson & Skinner, 1986; Van Damme et al., 2009). Human capital theory predicts that investments in education and labour market experience result in better jobs and higher income levels. This will also apply to women's situation after separation. Employers prefer women who are more productive, which makes it more likely for women with more human capital to find a job after separation. In addition, more productive women receive higher wages and higher wages may form a stronger incentive to work more hours after union dissolution. Hence, we expect that: *The more women invested in paid labour during their partnership, the more they will work after separation (hypothesis 3a).* This is what we call the work history effect.

Note that in our study this hypothesis is applied to separated women. Thus, the empirical test of this hypothesis does not include partnered women as a comparison group. For this reason, we have to take selection bias into account. Not only human capital in terms



of education or work experience may give women better labour market opportunities after separation, also personality traits such as self-confidence, work ethic (the preference to work), and being more emancipated, may provide women with higher labour market potential (Cunningham, 2008). We particularly have in mind housewives from older cohorts who would have liked to work, but did not do so because of the strong adverse normative environment. Hence, women who primarily engaged in domestic work during the union and nevertheless separated may be the economic ‘strong’ ones in terms of these unmeasured traits. Not including such variables in our analyses would bias the observed effect of work history downwards (the women who worked little incorrectly appear to have good labour market outcomes). Because these characteristics are unobserved, we use a two-step Heckman model to correct for the possible selection bias in the work history effect on post-separation employment. We also translate the selection effect in terms of a substantive hypothesis: *The more women are inclined to separate, the more hours they will work after separation (hypothesis 3b).*

Again, we expect to find cross-national differences in the magnitude of the work history effect on post-separation employment. We use the same argument as above, but now only the *actual* economic costs of marriage are relevant: More gender equality may reduce the actual economic exit costs. For instance, in countries with more equal employment opportunities for men and women, the effect of women’s work history may be weaker because even women who did not work much during the union have more employment opportunities after separation. More gender equality in a country will therefore encourage all separated women’s post-separation working hours regardless of their history. Thus: *The higher the degree of gender equality in a country, the less positive the work history effect on post-separation employment is (hypothesis 3c).*

## 4.3 Methods

### 4.3.1 Data

We use data of the Fertility and Family Surveys (FFS), which include retrospective information on four histories: fertility, family, education, and occupations. The data collection took place between 1988 and 1999 in 24 countries and was coordinated by the

Population Activities Unit (PAU) of the United Nations Economic Commission for Europe (UNECE). Between 1,700 and 10,500 women (on average around 4,000) per country were interviewed. The country surveys differ in the age groups that were sampled. Most countries interviewed women of age 18 through 49. Moreover, in Norway and Sweden selected single year birth cohorts were sampled. We do not select specific cohorts or age groups in most of our analyses because we control for age and year (and thus indirectly for cohort) in our models. However, for the descriptive figures and the estimation of the separation effect on employment, we select women aged 18 to 49 to enhance cross-national comparability. For a detailed discussion of FFS comparability issues, see Festy and Prioux (2002). See also Härkönen and Dronkers (2006) and Liefbroer and Dourleijn (2006) for studies on cross-national differences in other causes of divorce using the FFS data.

Using the retrospective information of start and end dates (year and month), we created a person-month file for each country including the histories of unions, employment, occupations, education, and children. We have comparable information on all histories for 17 countries (see Table 4.1). Our analytical sample consists of married/cohabiting and divorced/separated women aged 18 and older who were not in full-time education. In total our dataset consists of 50,790 women (see Table 4.1 for the number of cases and person-months per country). We observe on average 12 years of union history and 7.5 years after separation. Given the age selection of the FFS, we observe unions in their early and middle period, but not late in the union. Hence, we cannot generalize our findings to dissolutions of unions with a long duration. To keep the analyses simple, we only consider first marriages or cohabitations and, if relevant, their separations. Spells after a second separation transition and spells after a transition into widowhood are censored.

#### *4.3.2 Analytical approach and measures*

We present three separate analyses.

##### *First analysis*

We estimate the effect of women's employment on separation by a discrete-time event history model on a person-month file (Yamaguchi, 1991). The dependent variable is the probability of separation, conditional on being at risk of separation. Women are censored at the separation transition, at a transition into widowhood, or at the time of interview. We

Table 4.1

Sample sizes and descriptive statistics, 17 countries

	ALL	LV	EE	LT	FI	SE	CZ	SI	CH	EDE	WDE	NO	HU	AT	US	IT	ES	GR
Persons	50,790	2,314	1,705	2,372	3,706	3,007	1,371	2,263	3,493	2,273	1,848	3,202	2,976	3,900	8,017	3,321	2,850	2,172
First separations	12,747	729	523	378	889	1,115	341	175	854	566	487	766	554	952	3,772	208	216	222
% first separations	25	32	31	16	24	37	25	8	24	25	26	24	19	24	47	6	8	10
Person months	7,197,169	361,608	269,496	338,264	592,403	380,182	190,675	328,090	513,187	240,636	202,271	416,223	369,781	688,998	965,303	539,063	428,608	372,381
Year of fieldwork	88-99	95	94	94-95	89-90	92-93	97	94-95	94-95	92	92	88-89	92-93	95-96	95	95-96	94-95	99
Age sample	15-55	18-50	20-50	18-49	22-51	23-43	15-44	15-45	20-49	20-40	20-40	20-43	18-41	20-55	15-44	20-49	18-50	18-50
Year of first union	55-99	63-95	60-94	62-95	55-89	63-93	69-97	65-95	62-95	54-92	55-92	65-95	65-93	58-96	65-95	59-95	60-95	63-99
Year of first separation	57-99	66-95	65-94	68-95	57-90	65-93	74-97	69-95	63-95	71-92	72-92	65-89	70-93	63-96	66-95	73-95	73-95	68-99
Mean year of first union	81	80	75	82	75	80	85	82	81	82	82	77	81	80	82	81	82	84
Mean year of separation	85	85	81	86	81	83	89	85	85	86	86	82	85	86	85	88	88	88

LV=Latvia, EE=Estonia, LT=Lithuania, FI=Finland, SE=Sweden, CZ=Czech Republic, SI=Slovenia, CH=Switzerland, EDE=East-Germany, WDE=West-Germany, NO=Norway, HU=Hungary, AT=Austria, US=United States, IT=Italy, ES=Spain, GR=Greece.

Source: FFS (own calculations)

define *separation* as a transition from marriage or cohabitation in one month ( $t_{-1}$ ) to not living as a couple in the subsequent month ( $t_0$ ) due to divorce or separation.

*Women's number of working hours* during the union is the main independent variable. The variable is time-varying and constructed from the retrospective employment history. Only spells of at least three consecutive months of paid employment were considered and for each employment spell, respondents were asked to report the average number of working hours per week. They could choose from five categories: <10 hours; 10-24 hours; 25-34 hours; 35-44 hours; 45> hours (respondents who worked a variable number of hours were recoded to the middle category). To simplify the analyses, we consider the variable as an interval variable using the category mid points. Midpoints were obtained empirically from an additional analysis of the Labour Force Data (Eurostat) (women, aged 25-54). The variable consists of the following six scores: 0 (not working), 5.5 hours (1 – 9), 19 hours (10 – 24), 29.5 hours (25 – 34), 39.5 (35 – 44), 49.79 (45 – 60). Because being in education is a competing risk, we excluded spells of full-time education from the analysis.

Other specialization-related variables are: (1) The *average job status during the union*: the average International Socioeconomic Index (ISEI) score during the union up to the current month.<sup>2</sup> The ISEI score is recoded from the first two digits of the ISCO88. During non-working spells, respondents were assigned the job status of the previous job; (2) The *change in job status during the union up to the current month*.<sup>3</sup> This measures to what degree the respondent makes *career progress*; (3) The *duration of the union*; and (4) *Being married*. The last two variables provide a more indirect test of Becker's specialization hypothesis. We assume that married women and women in longer lasting unions specialize more in domestic work than cohabiting women and those in unions of short duration (Brines & Joyner, 1999; Kalmijn, Loeve & Manting, 2007). Marriage indicates a stronger commitment between partners, making it less risky for women to specialize in unpaid household labour. Moreover, the longer the union lasts, the more time women may have spent on domestic work during the union and the more their human capital declines.

<sup>2</sup> This measure is created by summing up the current job status and all previous job statuses in each month and divide them by the number of months women were in a union in that particular month.

<sup>3</sup> Calculated as the job status in the current month minus the job status in the previous month. The value remains constant if the woman's job status remains constant.

*Second analysis*

In our second analysis, we estimate the separation effect on employment. We perform a fixed effects regression analysis on the person-month file with *working hours* (operationalization is discussed above) as the dependent variable and *separation* as the main independent variable. Such a model enables us to estimate the separation effect adequately by not only taking observed differences between partnered and separated women into account, but also unobserved differences in employment history, as well as personality traits and work preferences. We compare three groups: (1) partnered women, (2) separated, single women, (3) separated women who repartnered.

*Third analysis*

Third, we examine the effect of women's work during the union on post-separation employment, using the *sample of separated women*. We run a random effects regression analysis with *working hours in the period after separation* as the dependent variable. For each woman, each month after separation is a separate record. For this reason, we use a random effects model which controls for the dependencies between multiple observations per person. *Working hours, job status, career progress, union duration, and being married* are measured similarly as in the first model, but now these variables are *time constant*, measured at the time of separation. The most important variable here is the *work history* of women during marriage. This is measured as the sum of all the paid working hours during the union divided by the number of months a woman was in a union. This measures basically the relative share of union time a woman was employed.

The effect of women's work history during the union will be distorted by the number of working hours women were working at the time of separation: They will be highly inclined to continue to work the same amount of hours after the separation. The work history effect may therefore be more relevant for women who do not work many hours at the time of separation, although one could also argue that work experience makes reductions in hours less likely. To find this out, we include the number of working hours of women in the month before separation and the interaction with the work history variable.

As explained in the theoretical section, unobserved differences in work values and personality traits (like self-confidence) may also be relevant. To correct for this selection bias, we estimate a two-step Heckman model. Although this method is not without problems (for a recent overview, see Fu, Winship & Mare, 2004), it is the best solution up to now to take sample selection bias into account. First, we estimate the conditional probability of

separation by a discrete-time event history probit model (the selection model). Using this model, we calculate the predicted probability to separate for all separated women. Next, the random effects regression on women's post-separation working hours (the outcome model) is performed. In this model we include the *predicted* separation probability. By including this latent trait, the bias in the effects of specialization on post-separation employment due to selection bias is diminished (Fu et al., 2004; Heckman, 1979). Following Heckman's two-step approach, we transform the estimated separation probability into an Inverse Mills Ratio (the probability of *not* being selected into the separated sample) before we include it in the model.

We use the average predicted separation probabilities of the last three years of separated women's union to reduce the degree of instability in the probabilities. As is well-known, the selection model needs to include at least one identifying variable which affects the probability of separation, but does not affect women's working hours. As identifying instruments we use parental divorce/separation, the degree of urbanization of the area where the respondent was raised, and church attendance. It is well known that these variables affect the separation risk (see also Table 4.3) while they are uncorrelated with women's post-separation working hours (Amato & DeBoer, 2001; Kalmijn, De Graaf & Poortman, 2004; Lillard, Brien & Waite, 1995; Wolfinger, 2005).<sup>4</sup> We thus have good identifying variables which tackles most of the concerns that usually exist in the application of Heckman models (Fu et al., 2004).

### *Macro-micro analysis*

Finally, we pool the countries and test to what extent the relationships between women's employment and separation are similar across countries that differ in their degree of gender equality. To test this, we include interaction effects of selected individual variables and the degree of gender equality in a country. Where possible, we use multilevel regression techniques to test the cross-level interaction effects, but this cannot always be done. Due to the large sample size and the complexity of the model, a multilevel regression model did not converge for the third analysis so in this case, we used the clustering option to test the cross-level interaction.<sup>5</sup> Note that the use of multilevel models in cross-national research is debated

<sup>4</sup> Although studies have shown that the current urbanization of the respondent's residence influences women's employment, the urbanization of the area where the respondent was raised in, is not correlated with women's post-separation employment.

<sup>5</sup> Clustering takes into account the smaller sample size of the level on which the macro-level effect should be tested; it corrects the standard errors of macro-level effects for the fact that observations within the same country are similar. Testing the significance of cross-level interaction effects using robust standard errors is too conservative, however.

since a low number of countries may cause problems in accurate estimation of parameters and standard errors of macro-level indicators (Meuleman & Billiet, 2009). Because in cross-national research the estimates of macro-effects may be largely driven by the specific sample of countries that is analyzed, we perform some sensitivity checks as well. More importantly, we also present our macro-level findings graphically. We use scatter plots where the degree of gender equality is on the horizontal axis and the regression effect is on the vertical axis. While such graphs are not formal tests of the hypotheses, they do give us a good idea of the face validity of the hypotheses.

Existing measures that show the degree of gender egalitarianism are the Gender Gap Index (GGI) of the World Economic Forum (2007) and the Gender Empowerment Measure (GEM) from the Human Development Report (UNDP, 1995). However, – apart from the fact that these measures do not provide scores for all the countries we analyze – they do not only contain economic aspects of gender equality, but also women’s political empowerment and health. Therefore, we created a new measure, in which we focus only on economic participation and opportunity. The measure includes (a) women’s employment rate, (b) the share of female part-time work and (c) institutional employment support for women (parental leave and public childcare policies). We added institutional support because it is known to influence women’s employment after separation as well (Van Damme et al., 2009). The correlation on the country-level between our gender equality measure and GGI is 0.61 and the correlation with GEM is 0.81.

Table 4.2 shows that the Baltic and Nordic countries are the most gender equal with high employment rates, ample public child care provisions, and generous parental leave arrangements. The Central European countries (the Czech Republic, Switzerland, Germany, Austria, and Hungary) have middle high levels of women’s employment and either high state employment support or high levels of part-time work. Finally, the Southern European countries (Spain, Italy, Greece) score rather low on all indicators of gender equality.

### *Control variables*

In all models, we control for education, age, year, and the age of the youngest (biological) child. The *highest level of education* (time constant) is measured at the time of interview in 7 ISCED categories. We include the variable as an interval variable, recoded relative to the country’s educational composition. We control for *year* and *year squared* to take period effects into account. In the fixed effects model estimating the separation effect on women’s

working hours, we do not include year since it is highly correlated with age and we do not control for education because it is time constant.

Table 4.2  
Measures indicating a country's degree of gender equality in economic opportunities

	Women's employment rate	Public child care provisions	Parental leave	Share of part- time work	Summary Index
Latvia (LV)	88.18	42	52		<b>0.93</b>
Estonia (EE)	91.52	38 <sup>b</sup>	52		<b>0.90</b>
Lithuania (LT)	90.33	34	52		<b>0.80</b>
Finland (FI)	76.21	31	156	10.62	<b>0.57</b>
Sweden (SE)	75.80	29	64	24.49	<b>0.41</b>
Czech Republic (CZ)	85.90	8 <sup>c</sup>	156 <sup>c</sup>	5.76	<b>0.25</b>
Slovenia (SI)	72.36				<b>0.22</b>
Switzerland (CH)	62.09		0	42.59	<b>0.07</b>
East-Germany (EDE) <sup>a</sup>	65.47	2	96	29.79	<b>0.04</b>
West-Germany (WDE) <sup>a</sup>	65.47	2	96	29.79	<b>0.04</b>
Norway (NO)	65.57	8	24	39.82	<b>0.03</b>
Hungary (HU)	70.67	8	156 <sup>d</sup>	4.34	<b>-0.03</b>
Austria (AT)	64.75	3	96	21.62	<b>-0.12</b>
United States (US)	66.33		0	20.22	<b>-0.45</b>
Italy (IT)	47.16	5	24	18.36	<b>-0.76</b>
Spain (ES)	42.91	5	0	11.52	<b>-1.07</b>
Greece (GR)	42.08	4	0	11.57	<b>-1.10</b>

<sup>a</sup> There is not data available for these indicators for East-Germany before the reunification.

<sup>b</sup> For Estonia, we estimate the public child care provisions to be the average of Latvia and Lithuania.

<sup>c</sup> For Czech Republic, we assume public child care provisions and parental leave are similar as in Hungary (maternity leave schemes (1998) and public expenditure on in-kind benefits (1989) are similar. Source: UNICEF (1999).

<sup>d</sup> For Hungary, figure refers to 1995. Source: *The Clearinghouse on International Developments on Child, Youth and Family Policies* (2004).

Definitions:

Women's employment rate: Age standardized employment rates for women aged 20-54; Average rate of period 1970-2000. Source: International Labour Organization: <http://kilm.ilo.org/KILMnetBeta/default2.asp> (visited: 29.04. 2010).

Public child care provision: The number of public childcare places per 100 children under age three in publicly funded day care services (1988-1993). Source: Tietze & Cryer (1999).

Parental leave: The number of fully paid weeks of parental/child care leave for a mother with 2 children (excluding leave to care for a sick child) (1990-1995). Source: Tietze & Cryer (1999) and Kamerman (2000).

Share of part-time work: Percentage of female part-time work (less than 30 hours) that is part-time instead of fulltime. Source: OECD: <http://stats.oecd.org/Index.aspx>.

Summary Index: Average of standardized score on the four indicators.

## 4.4 Results

### 4.4.1 Descriptive analyses

Before we turn to the three analyses, we present some descriptive results. To what extent do separated women work more hours than partnered women in each country? In Figure 4.2 the number of working hours of partnered (married and cohabiting) and separated women aged 18-49 are presented per country. In all figures, the solid (upper) line reflects the change in the



working hours for an *average* separated woman in the period before and after separation (repartnered women are included). The upper x-axis represents the duration of the union of separated women up to the time of separation and the duration of time after separation. In other words, the line describes the periods before *and* after the separation. The time of separation is located at the average union duration at the time of separation (for instance, the average union duration of the women who separate in Finland is 89 months). We consider a maximum period of 160 months because of the low number of separated women in some countries. We compare this line with the change in working hours during the partnership of an average partnered woman (dashed line). The scale on the bottom x-axis is the duration for women who did not separate. This scale starts at the first year of the union and goes up to a maximum of 160 months. We corrected the yearly working hours for the period trend in the average number of working hours in the country concerned.

The figure shows three effects. For didactic reasons, we start with discussing the figure for Finland. First, women who work more hours when partnered are more inclined to separate. Hence, in Finland separation is a selective phenomenon; women mostly seem to separate when they can afford it, i.e., when they work more hours, hence when they specialized less during their partnership. The effect of women's employment on separation is the first relationship we will examine with multivariate analyses in the next section. Second, women only moderately increase their employment after separation and decrease it slightly in the long term. The effect of separation on women's working hours is the second relationship we will investigate in a multivariate way. Third, women increase their employment already in the months *before* the separation. This may have to do with anticipation. Women might anticipate a separation by returning to work or by increasing their work hours to compensate for the upcoming income loss after the split up (Johnson & Skinner, 1986; Poortman, 2005). An alternative explanation is that the period around separation coincides with the stage in which the children become older and in which (some) women return to the labour market. Exactly in these life stages, women are the most likely to divorce (Brines & Joyner, 1999; Waite & Lillard, 1991). Note that we do not have many women in the empty nest phase, due to the young age sample of the FFS. The third relationship we test is the effect of women's employment history on their post-separation working hours.

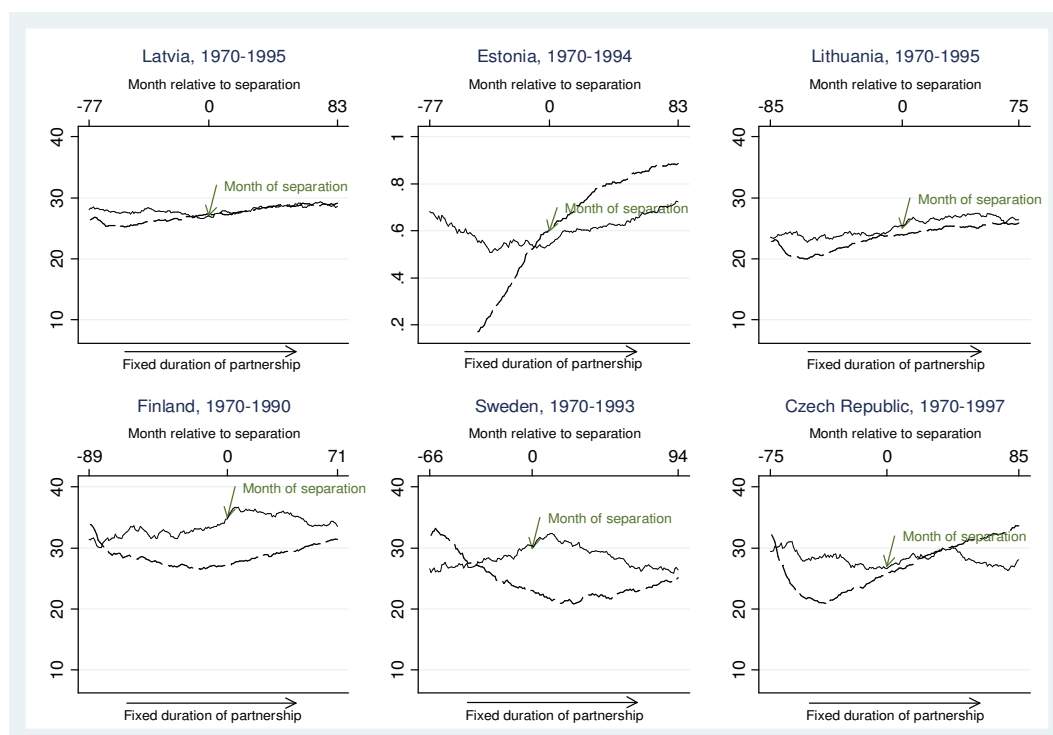


Figure 4.2

Working hours of average separated and non-separated women.

Note: For Estonia and Austria, the number of working hours were not asked. Instead, we used employment status and, to increase cross-national comparability, we recoded the dummy into scores 0 for non-working women and score 39.5 for working women.

Source: FFS (own calculations)

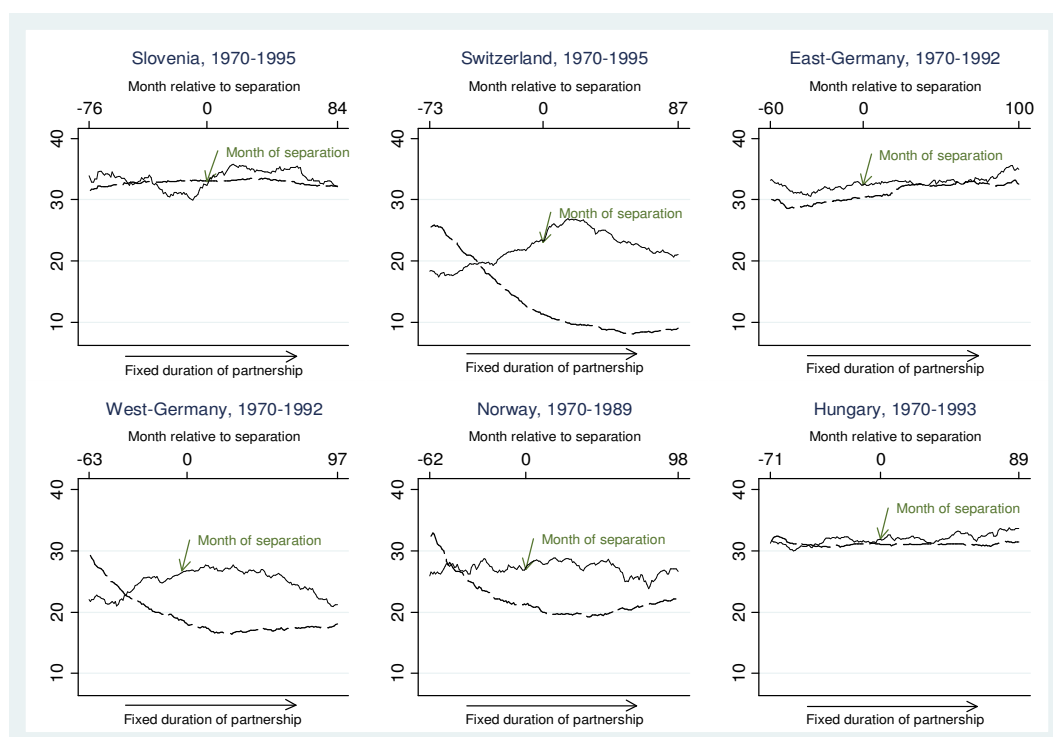


Figure 4.2 (continued)

Note: For Estonia and Austria, the number of working hours were not asked. Instead, we used employment status and, to increase cross-national comparability, we recoded the dummy into scores 0 for non-working women and score 39.5 for working women.

Source: FFS (own calculations)

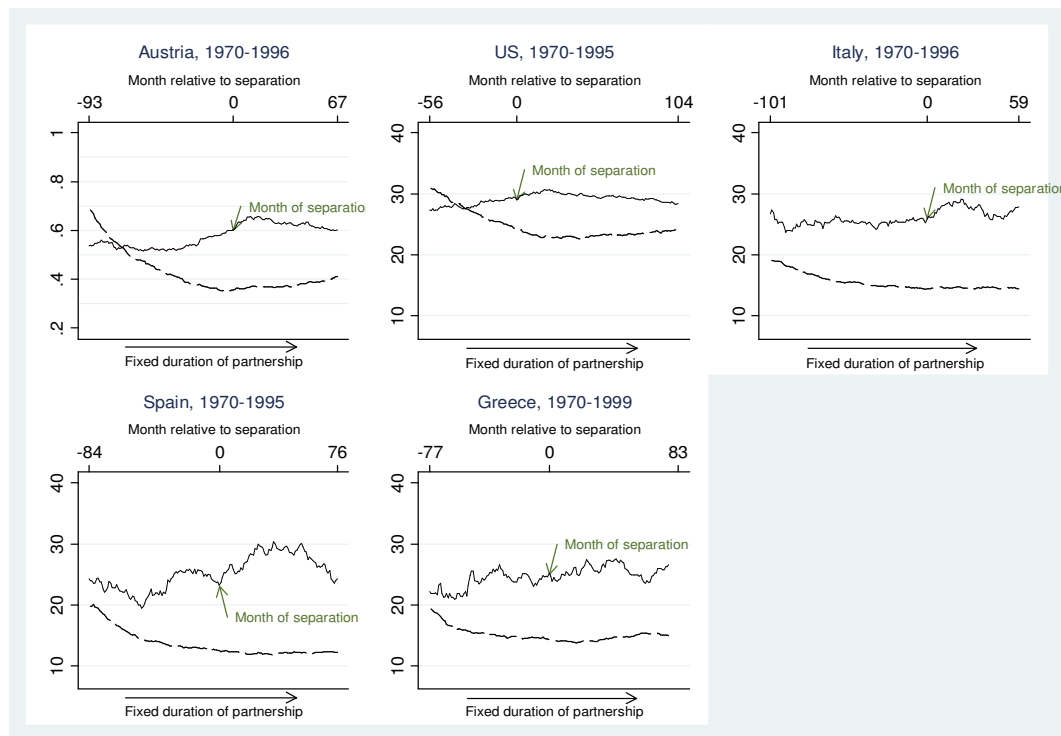


Figure 4.2 (continued)

Note: For Estonia and Austria, the number of working hours were not asked. Instead, we used employment status and, to increase cross-national comparability, we recoded the dummy into scores 0 for non-working women and score 39.5 for working women.

Source: FFS (own calculations)

Looking at all the country figures, we see a clear increase in women's post-separation working hours in Switzerland, Austria, Spain, Italy, and Estonia. In Sweden, Austria, the Czech Republic, and Slovenia (next to Finland), the increase in employment is modest, while in the US the change is very smoothly spread over two years. In the other countries we observe no change. Furthermore, the pictures show that separation is highly selective in terms of employment in Austria, Switzerland, Spain, Italy, and Greece, whereas in the other countries the average working hours of separated women differ less from that of partnered women. In East-Germany, Czech Republic, Hungary, Slovenia, Latvia, and Lithuania, we do not observe differences between the two groups. In Estonia, women who separate worked on average less during the union than women who do not separate. Additionally, Finland, Sweden, West-Germany, Austria, Switzerland, Spain, and Greece show possible anticipation effects – meaning that employment increases in the months immediately before the separation. In the regression analyses, we will discuss country differences in a more elaborate fashion.

#### 4.4.2 *The effect of women's work history on separation*

To what extent does women's employment history affect the risk of separation? Table 4.3 shows the estimates of women's working hours and other indicators of specialization on the probability to separate using a discrete-time event history model.

##### *Overall effects*

Like in previous single-country studies (Brines & Joyner, 1999; De Rose, 1992; Jalovaara, 2003; Liefbroer & Dourleijn, 2006; Poortman & Kalmijn, 2002; South, 2001), we find that in 11 of the 17 countries women's employment significantly increases the risk of separation. For instance, in the US fulltime working women are 38% [ $\exp(40 \cdot 0.008)$ ] more likely to separate than non-working women. However, in Sweden, Norway, Czech Republic, Slovenia, Estonia, and Latvia, there is no significant effect of women's working hours on separation. Other measures of specialization during the union (the average job status and career progress) do not have a significant positive influence, except in Spain where women with a higher job status during the union have a higher separation risk than women with a lower job status and in Switzerland and Slovenia where career progress of women is positively related to the risk of separation. Unexpected is the negative effect of job status in Lithuania. In almost all countries, married women are less likely to separate than cohabiting women, confirming what has been shown before (Brines & Joyner, 1999; Kalmijn et al., 2007; Liefbroer & Dourleijn, 2006).

In nine countries, union duration initially increases the risk of separation, but this effect slows down and decreases after about six to thirteen years of the union, depending on the country. The US is an outlier with a negative (U-shaped) duration effect. Previous studies on American data reported mixed results on this. South (2001) and Sayer and Bianchi (2000) found a negative duration effect, whereas Schoen et al. (2002) found a negative effect only for marriages lasting longer than ten years, and Ono (1998) found a positive heap in the first five union years. In the Nordic countries, Czech Republic, Slovenia, Spain, and Greece, no significant duration effects are found.

Parental divorce, the degree of urbanization, and church attendance all have the expected effects. Women whose parents divorced or separated when they were younger than age 18 are more likely to separate. Although in some countries the estimates are not significant, they are still in the expected direction. Furthermore, the more urbanized the area where women lived when they were young, the higher the risk of separation. Women who

Table 4.3

Discrete-time event history analyses of the odds of a first separation for partnered women, 17 countries, 1955 – 1999

	LV	EE <sup>d</sup>	LT	FI	SE	CZ	SI	CH
<i>Women's employment</i>								
Working hours (lagged)	0.000	0.003	0.009**	0.016***	0.004	0.001	0.000	0.009**
Job status in partnership	-	-	-0.008**	-0.003	-	-0.005	-0.002	-0.001
Career woman	-	-	0.005	0.001	-	-0.003	0.030*	0.008*
Union duration (centred)	0.003*	0.002	0.012***	-0.000	-0.002	-0.004	-0.005	0.012***
Union duration (centred) <sup>2</sup>	-0.000***	-0.000***	-0.000***	-0.000	-0.000	-0.000	-0.000	-0.000***
Married	-0.993***	-0.030	-0.934***	-1.157***	-0.892***	-0.969***	-0.089	-1.520***
<i>Identifying variables</i>								
Parents divorced (respondent < age 18)	0.256**	0.279*	0.331*	-	0.247**	0.326*	0.469*	0.566***
Parents divorced (respondent ≥ age 18) <sup>a</sup>	0.374*	0.265	0.534*	0.615***	- <sup>c</sup>	0.175	0.540	0.253
Urbanization of area respondent was raised <sup>b</sup>	0.126***	0.187***	0.154***	-	0.175***	0.244***	0.302***	0.093*
Church attendance	0.050	-	-	-0.210***	-0.026	-0.064	-0.249***	-0.075**
<i>Control variables</i>								
Year (centred)	-0.000	0.015	0.041*	0.021	0.025*	0.066**	-0.071**	-0.011
Year (centred) <sup>2</sup>	0.001	-0.002*	-0.001	-0.000	0.000	-0.002	0.003	0.001
Age at union	-0.073***	-0.097***	-0.053**	-0.080***	-0.109***	-0.111***	-0.145***	-0.103***
Youngest child 0-6	-0.388***	-0.254*	-0.770***	-0.021	-0.476***	0.018	-0.073	-0.349*
Youngest child 7-17	-0.271	0.248	-0.594**	0.073	-0.280	0.113	0.825*	0.343*
Educational level	-0.093	-0.206	0.072	0.139	0.231*	-0.479*	0.255	0.110
Constant	-3.689***	-4.050***	-4.746***	-4.284***	-3.720***	-3.527***	-4.417***	-3.484***
Chi-square	215***	128***	131***	488***	528***	146***	104***	533***
df	15	13	15	15	13	16	17	16
Pseudo-R <sup>2</sup>	0.024***	0.023***	0.027***	0.043***	0.045***	0.033***	0.044***	0.062***
N (first) separations	690	493	351	768	869	311	164	819
N person months	271,806	180,614	261,795	499,828	285,006	158,020	268,674	323,092

Unstandardized coefficients; \*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ , one-tailed tested.<sup>a</sup> In Finland, the respondent was asked whether parents were separated/divorced when respondent was aged 14. We included a dummy for whether the respondent's parents divorced or not.<sup>b</sup> In Latvia, 12% of the respondents had a missing value on the degree of urbanization. We recoded the missings into category 3 and included a dummy for missingness on this variable.<sup>c</sup> In Sweden, only experience of a parental divorce before age 16 was asked.<sup>d</sup> For Estonia and Austria, the number of working hours were not asked. Hence, we used employment status instead of working hours and, to increase cross-national comparability, we recoded the dummy into scores 0 for non-working women and score 39.5 for working women.

- question not asked

Source: FFS (own calculations)

Table 4.3 (continued)

	EDE	WDE	NO	HU	AT	US	IT	ES	GR
<i>Women's employment</i>									
Working hours (lagged)	0.012***	0.014***	0.000	0.006*	0.011*** <sup>d</sup>	0.008***	0.016***	0.011**	0.019***
Job status in partnership	0.001	-0.004	-	-0.002	-	-	-	0.011*	-0.004
Career woman	-0.008	0.003	-	-0.001	-	-	-	-0.000	0.010
Union duration (centred)	-0.001	0.005*	0.001	0.002	0.003**	-0.009***	0.008*	0.001	-0.002
Union duration (centred) <sup>2</sup>	-0.000*	-0.000***	-0.000	-0.000**	-0.000***	0.000**	-0.000**	-0.000	-0.000
Married	-1.135***	-1.206***	-1.535***	-1.232***	-1.090***	-1.270***	-1.511***	-2.122***	-1.615***
<i>Identifying variables</i>									
Parents divorced (respondent < age 18)	0.576***	0.501***	-	0.105	0.428***	0.155***	1.204***	0.337	0.741**
Parents divorced (respondent ≥ age 18) <sup>a</sup>	0.274	0.233	-	0.083	0.530**	0.176*	0.293	0.354	0.416
Urbanization of area respondent was raised <sup>b</sup>	0.144***	0.105*	0.207***	0.243***	0.160***	-	0.151*	0.266***	0.269***
Church attendance	0.014	-0.259***	-0.133**	-0.141***	-	-0.105***	-0.263***	-0.135**	-0.164*
<i>Control variables</i>									
Year (centred)	0.062*	0.036	0.050**	0.016	0.044***	0.012*	0.065	0.064*	0.017
Year (centred) <sup>2</sup>	-0.001	0.000	-0.001	0.000	-0.000	0.000	-0.000	-0.002	-0.002
Age at union	-0.053**	-0.066***	-0.101***	-0.084***	-0.103***	-0.082***	-0.098***	-0.094***	-0.033
Youngest child 0-6	0.009	-0.113	-0.290**	-0.722***	-0.123	0.124**	-1.416***	-0.208	-0.636**
Youngest child 7-17	0.225	0.592**	0.031	-0.246	-0.223*	0.345***	-0.824**	-0.604*	-0.257
Educational level	-0.322	0.168	0.083	-0.137	-0.339**	-0.022	0.795*	0.735**	0.122
Constant	-5.032***	-4.463***	-3.560***	-3.875***	-4.254***	-2.508***	-4.857***	-5.425***	-5.599***
Chi-square	247***	312***	703***	271***	634***	2,196***	178***	295***	208***
df	17	17	13	16	14	13	14	16	17
Pseudo-R2	0.039***	0.061***	0.071***	0.038***	0.051***	0.057***	0.072***	0.088***	0.076***
N (first) separations	500	405	716	501	863	3,021	180	202	167
N person months	183,456	151,369	334,577	303,334	571,935	652,541	444,651	402,438	327,394

Unstandardized coefficients; \*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ , one-tailed tested.

<sup>a</sup> In Finland, the respondent was asked whether parents were separated/divorced when respondent was aged 14. We included a dummy for whether the respondent's parents divorced or not.

<sup>b</sup> In Latvia, 12% of the respondents had a missing value on the degree of urbanization. We recoded the missings into category 3 and included a dummy for missingness on this variable.

<sup>c</sup> In Sweden, only experience of a parental divorce before age 16 was asked.

<sup>d</sup> For Estonia and Austria, the number of working hours were not asked. Hence, we used employment status instead of working hours and, to increase cross-national comparability, we recoded the dummy into scores 0 for non-working women and score 39.5 for working women.

- question not asked

Source: FFS (own calculations)

attend church frequently are less likely to separate than women who do not attend church. Sweden, East Germany, Czech Republic, and Latvia have non significant effects of church attendance, whereas Austria has an unexpected positive effect.

The effects of the control variables are as expected as well. The risk of separation increases over time in almost all countries (the effect is significant in eleven countries). Furthermore, the older the age of women at their first union, the lower the separation risk. The influence of education differs between countries; in most countries education does not significantly affect women's risk of separation, whereas in Sweden, Spain, and Italy, higher education increases the separation risk, and in Austria and the Czech Republic the reverse is true.<sup>6</sup> Lastly, women with children – especially children below the age of 6 – are less likely to separate than women without children in most of the countries. The US is an outlier with a positive effect for the youngest age group. Note that the effect of children is a mix of the number and the ages of children, which makes it difficult to disentangle the effects (Waite & Lillard, 1991).

### *Country differences*

To what extent are the differences in the work effect related to the extent of gender equality in a country? To answer this question, we present a scatter plot with the effect of women's working hours on the vertical axis and the degree of gender equality in a country on the horizontal axis (Figure 4.3). As argued in the theoretical section, we hypothesized that in more egalitarian countries, employment has a less positive effect on the risk of separation. We expect this because of lower expected exit costs. We indeed observe a negative relationship between a country's gender equality and the work effect on separation. Tests using a multilevel analysis on the pooled model of all countries confirm this finding: The cross-level interaction between women's working hours and the degree of gender equality in a country on the risk of separation is significantly negative. To check the robustness of the cross-level interaction effect, we performed an outlier analysis by calculating the DFBETA. To obtain DFBETA, we computed the difference between regression coefficients of the work effect in the full sample and in the sample without the specific case, divided by the standard error of the coefficient in the smaller sample (Belsley, Kuh & Welsch, 1980). Normally, this indicator is calculated for individual cases, but we use the same logic to countries. We find

---

<sup>6</sup> Härkönen & Dronkers (2006) had similar findings, except for a larger effect in Greece and a smaller effect in Sweden. For Greece, the larger effect might be due to not controlling for the work effect. For Sweden, we do not know the cause of the difference.

that the cross-level interaction between the work effect and a country's gender equality is fairly stable, regardless of the specific country sample. The biggest outliers are Finland (DFBETA = 2.00) and the US (DFBETA = 3.00), both these are above the critical value, which is  $(1/\sqrt{17} = ) 0.243$ . Excluding each of these countries from the model results in an even stronger negative relationship between the work effect on separation and a country's gender equality. Finland might be an outlier because its FFS birth cohort sample includes relatively old cohorts; for younger cohorts, we might expect a weaker effect of women's working hours on separation. Härkönen and Dronkers (2006) also found unexpected results for Finland in their study with the FFS data. The US is an exceptional case since it is the only non-European country in the sample and it has a much higher divorce risk than all other countries. Based on the country's gender equality score, we would have expected to find a stronger work effect on separation. In sum, we conclude that paid employment is less disruptive for the union in egalitarian societies, although this conclusion must be taken with some caution because a sample size of 17 countries is rather small to test effects of micro-macro interactions.

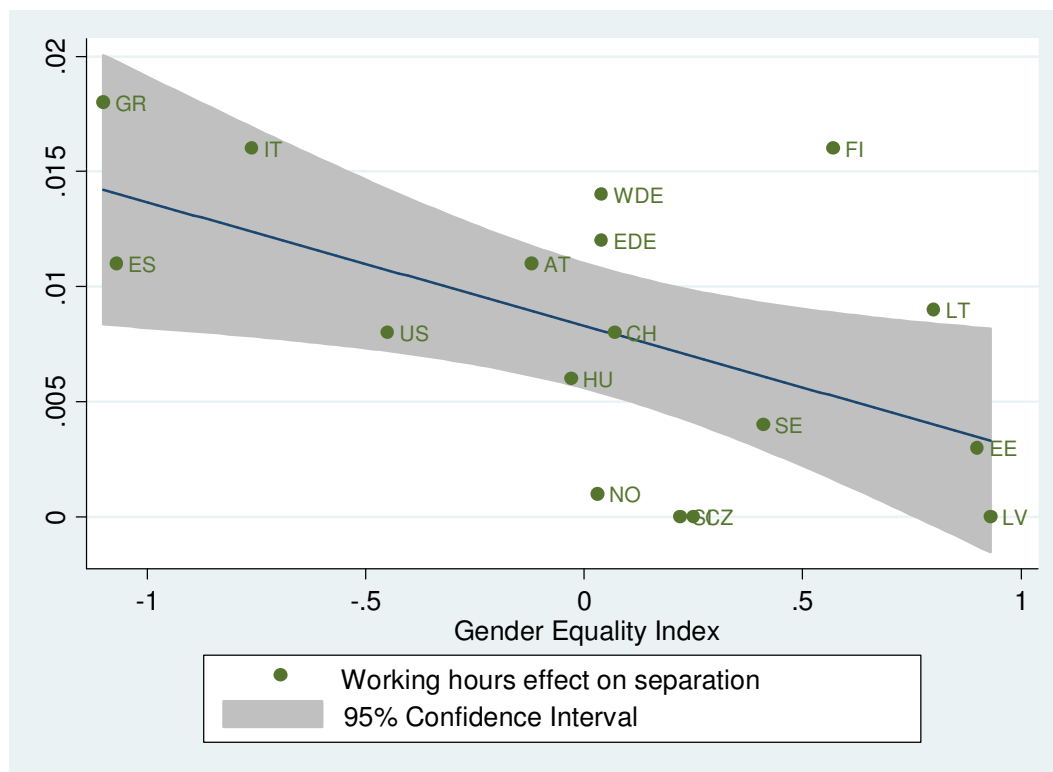


Figure 4.3  
Working hours effect on separation by degree of gender equality in a country.  
Source: FFS (own calculations)



#### 4.4.3 The effect of separation on employment

To what extent do separated women work more hours? We examine changes in working hours using a fixed effects regression analyses. This model takes unobserved differences in the time-constant characteristics of separated and partnered women into account, like differences in specialization, work preferences, more liberal sex-role values, or personality traits. All the variance *between* persons is cancelled out and we only estimate the effects of changes between observations (within a person). Hence, the model only consists of time-varying variables. In the descriptives section, we mentioned the importance of the life course stage women are in. To take this into account, we control for the age of the woman, having children, and the age of the youngest child. We illustrate the results of the models in Figure 4.4.

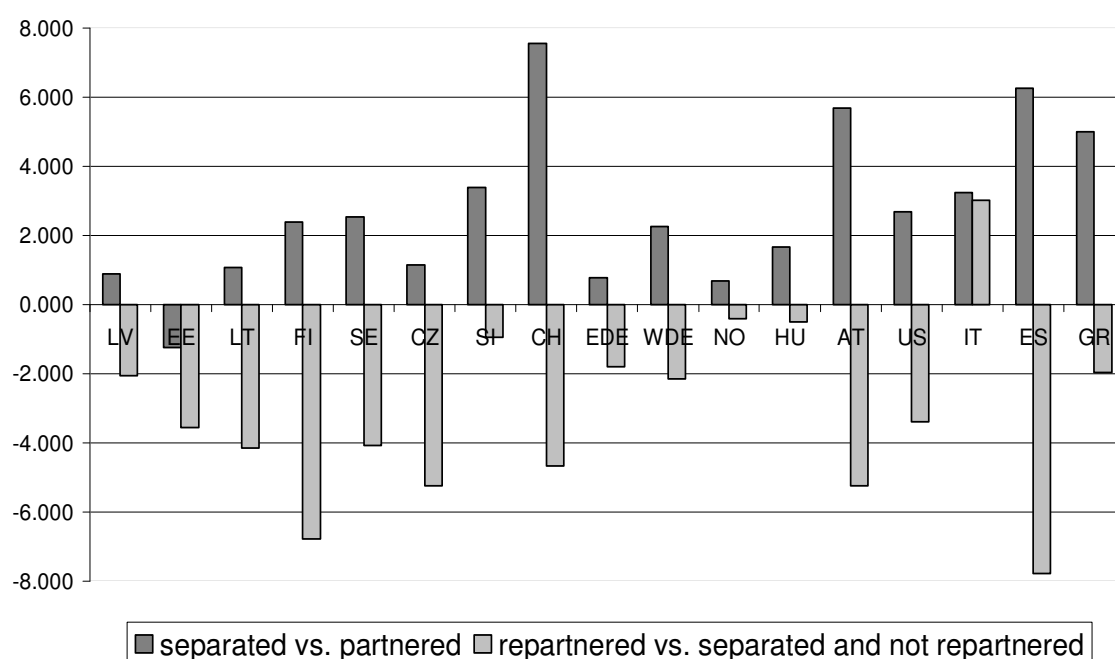


Figure 4.4  
Separation and repartnering effects on women's working hours.  
Source: FFS (own calculations)

#### Overall effects

The first (upward) bars in the figure show per country the separation effect, that is the number of working hours separated single women work compared to partnered women. The figures show that in all countries except Estonia separated single women on average

significantly work more hours than partnered women at a particular moment in time. However, repartnering strongly decreases women's employment (see the downward bars). Repartnering is included by a cumulative dummy, meaning that repartnered women are compared with separated single women.<sup>7</sup> In half of the countries, repartnered women end up working *fewer* hours than *partnered* women (the negative effect of remarriage is larger than the positive effect of union dissolution).

### *Country differences*

In Figure 4.5, we present a scatter plot with the separation effect and the degree of gender equality in a country. The separation effect is strongest in Switzerland, Slovenia, and the Southern European countries and weakest in Norway and the Eastern European countries. This is consistent with what we would have expected from the descriptive figures. Swiss separated women work on average about a day more than partnered women, whereas Norwegian separated women work only 0.7 hours more than their partnered counterparts. The cross-level interaction effect was significant and negative, which suggests that the separation effect on women's working hours is larger in traditional countries. However, we hypothesized that the effect would be larger in egalitarian countries. This discrepancy may point to remaining selection effects. Although fixed effects models take unobserved differences between partnered and separated women into account, they only account for time-invariant differences; differences in growth and development curves cannot be controlled for. An explanation for the larger separation effects in traditional countries might thus be selection bias. Some women may have personality traits or hidden ambitions which become manifest only after their separation. Think for instance of two types of housewives, both not having any work experience during marriage: One may have an ambitious personality with a strong work ethic, whereas the other one is not ambitious and does not have strong work preferences. After separation, the first housewife will become aware of her work ambition and increase her working hours, whereas the second housewife will continue to be non working. Hence, there might still be selection: In traditional countries relatively more women with hidden work ambitions separate than in more egalitarian countries.

Again, we performed an outlier analysis to check the robustness of our findings. This analysis suggests that the cross-level interaction is not very robust. Of the 17 countries, 15

---

<sup>7</sup> We created three groups: 1. partnered; 2. separated and not repartnered 3. separated and repartnered. Subsequently, we created two dummy's (1 (0) vs. 2 + 3 (1)) and (1 + 2 (0) vs. 3 (1)).

countries produce a DFBETA which is larger than the critical value of 0.243. The biggest outliers are Estonia (DFBETA = 43.2), Latvia (DFBETA = -28.6), and the US (DFBETA = -13.1). Excluding Estonia from the model, does not change our conclusion because it results in a much larger negative significant cross-level effect. Yet, excluding Latvia or the US from the model turns the effect into a significant positive direction. An exclusion of any of the other countries does not change the direction, nor the significance of the effect.

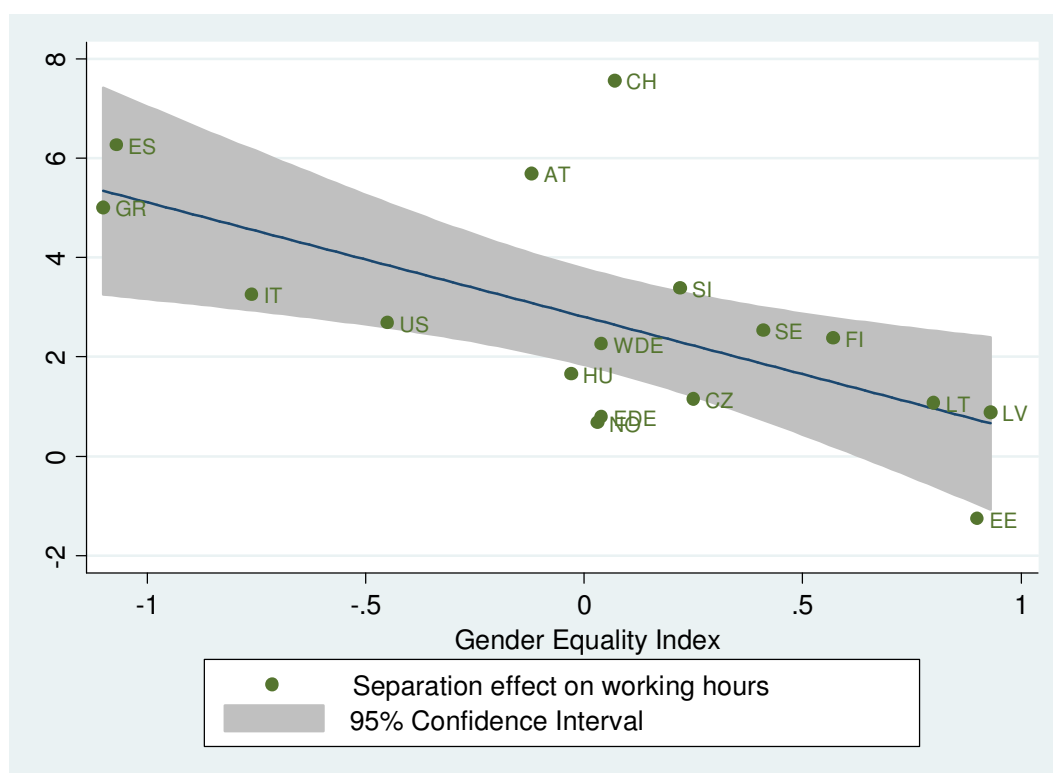


Figure 4.5  
Separation effect on women's working hours by degree of gender equality in a country.  
Source: FFS (own calculations)

#### 4.4.4 The effect of women's work history on post-separation employment

To what extent does the relative share of union time a woman was employed affect her working hours after separation? We ran several models per country and in order to explain the models better, we first present a pooled model for all the countries (Table 4.4). Later on, we discuss country differences. We controlled the pooled model for country (dummies) and weighted the cases of each country, so that all countries had an equal influence in the pooled model.

*Overall effects*

Because women's working hours at the time of separation are highly correlated with the effect of women's work history (correlation = 0.77), we included an interaction with women's working hours at the time of separation. Generally, we can conclude from the table that the more women worked during the union, the more hours they work after separation. The effect of women's work history during the union is in the expected direction and statistically significant. The interaction effect is not significant, however. Hence, women's work history does matter regardless of their working hours at the time of separation. The maximum effect of work history on post-separation working hours is about 3.5 hours. Women who worked fulltime all the time during the union work 3.5 hours more after separation than women who never worked during the union.

Model 1 does not include women's average job status during the union and the degree to which women make career progress because this information is available only for ten countries. In the pooled model with the countries that do have job status information, we observe that women who were working in jobs with a higher status work more hours after separation than those who had a lower job status during the union. Moreover, the stronger the increase in job status during the union (measuring women's career progress), the more hours women work after separation. These effects are in line with the expectations.

We find no support for our expectations about the effects of union duration and marital status of women before the separation. Union duration does not significantly affect separated women's working hours. Furthermore, women who were married before the separation work *more* hours after separation than before, and not *less* as we expected.

Is the employment increase after separation temporary? Looking at the post-separation duration effect, we observe that separated women increase their hours more up to three years after separation compared to the year of separation. From four years on the increase levels off.

We now discuss some of the other effects in the model. We find curvilinear effects of both period and age on women's post-separation employment. Women's number of working hours increases with age up to age 37 and then decreases. Repartnering is negatively associated with post-separation employment. Apparently, a new partner reduces the need for employment to compensate income loss due to separation (Dewilde & Uunk, 2008). Furthermore, the younger the age of the child, the fewer hours women work after separation. Educational level and being in part-time education increase the number of working hours after separation.

Table 4.4

Random effects OLS regression analyses on the number of post-separation working hours for separated women, pooled model 17 countries, 1955 – 1999 (country dummies included, each country weighs equally)

	Model 1	Model 2 <sup>b</sup>
<i>Work history during union</i>		
Proportion hours worked during union <sup>a</sup>	3.565***	3.139***
Working hours at separation	0.460***	0.460***
Proportion hours worked <sup>a</sup> * working hours at separation	0.006	0.005
Job status during union	-	0.047***
Career progress during union	-	0.015**
Union duration	-0.003	0.004
Married before separation	2.750***	2.254***
<i>Post-separation duration</i>		
1 Year after separation	0.936***	1.163***
2 Years after separation	1.138***	1.707***
3 Years after separation	1.111***	2.072***
4 Years after separation	0.928***	1.984***
5 Years after separation	0.399***	1.505***
<i>Control variables</i>		
Year (centred)	0.175***	0.235***
Year (centred) <sup>2</sup>	-0.015***	-0.022***
Age (centred)	0.285***	-0.094**
Age (centred) <sup>2</sup>	-0.008***	-0.000
Repartnered (lagged)	-2.196***	-2.673***
Youngest child 0-6	-6.385***	-6.045***
Youngest child 7-17	-3.684***	-3.349***
Educational level	3.392***	2.460***
In part-time education (lagged)	0.788***	1.904***
Constant	29.011***	24.931***
<i>Selection effect (- Lambda)</i>	0.186	-1.701**
Chi-square (df)	38,163 (37)***	18,261 (32)***
Sigma person level	10.422***	9.903***
Rho	0.498***	0.488***
N (first) separations	10,249	3,730
N person months	887,137	327,358

Unstandardized coefficients; \*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ , one-tailed tested.

<sup>a</sup> For Austria and Estonia, this measure includes only the number of months women were employed (not their working hours) as a proportion of the union because the number of working hours were not asked.

<sup>b</sup> Model for selection of countries: FI, LT, CZ, HU, EDE, WDE, CH, SI, GR, ES.

Source: FFS (own calculations)

### *The selection effect*

To what extent are the women who separate a selective group (those who work more hours)? On average, we do not find that selection matters, as indicated by the insignificant effect of Lambda. To facilitate the interpretation we reversed the sign of the “Inverse Mills Ratio”. This means that women who were more prone to separate (i.e., more likely to be ‘selected’ into the separation category) do not work significantly more hours after separation.

Table 4.5

Selection and women's work history effects on the number of post-separation working hours for separated women, 17 countries, 1955 – 1999

	Pooled	LV	EE <sup>a</sup>	LT	FI	SE	CZ	SI	CH
Proportion working hours union <sup>b</sup>	3.566***	0.967	5.023*	2.334	-0.231	2.082*	0.282	5.016*	0.725
Working hours at separation <sup>c</sup>	0.459***	0.482***	0.670***	0.596***	0.270***	0.233***	0.481***	0.395***	0.280***
<i>Other specialization variables</i>									
Job status during union <sup>d</sup>	0.046***	-	-	0.002	0.060*	-	-0.009	-0.003	0.020
Career progress during union <sup>d</sup>	0.015**	-	-	0.029	-0.028	-	-0.022	-0.090	0.028
Union duration	-0.003	0.010	-0.090***	-0.008	-0.004	-0.009	-0.010	0.001	0.030**
Married before separation	2.746***	-0.325	1.511	-0.227	3.269***	2.067*	3.433	-1.407	4.827**
<i>Selection effect</i>									
Selection effect (- Lambda)	0.186	-0.877	1.899	-5.138	-0.238	0.203	-8.772*	5.421*	3.817
Chi-square (df)	38,155 (36)***	4,557(19)***	17,978(19)***	2,473(19)***	7,484(20)***	10,984(19)***	2,399(19)***	1,275(20)***	17,696(19)***
Sigma person level	10.426***	8.987***	10.287***	9.358***	8.773***	8.460***	10.698***	7.234***	10.380***
Rho	0.498***	0.494***	0.563***	0.511***	0.421***	0.357***	0.506***	0.418***	0.491***
N (first) separations	10,249	653	400	309	758	855	302	138	587
N person months	887,137	67,721	44,736	29,664	72,332	71,871	26,023	15,800	56,948

Unstandardized coefficients; \*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ , one-tailed tested; For each variable country differences are significant. This is tested by including interactions of the relevant variable with country in the pooled model.

<sup>a</sup> For Austria and Estonia, the dependent variable is dichotomous: whether women work or not after separation.

<sup>b</sup> For Austria and Estonia, this measure includes only the number of months women were employed (not their working hours) as a proportion of the union because the number of working hours were not asked.

<sup>c</sup> For Austria and Estonia, this variable is dichotomous: whether women work or not in the month before separation.

<sup>d</sup> Model including job status during union and career progress for selection of countries: FI, LT, CZ, HU, EDE, WDE, CH, SI, GR, ES.

Source: FFS (own calculations)

Table 4.5 (continued)

	EDE	WDE	NO	HU	AT <sup>a</sup>	US	IT	ES	GR
Proportion working hours union <sup>b</sup>	3.823*	5.621**	5.662***	-0.474	1.455	6.223***	-1.746	11.312***	0.884
Working hours at separation <sup>c</sup>	0.624***	0.536***	0.364***	0.523***	0.406***	0.398***	0.670***	0.294***	0.524***
<i>Other specialization variables</i>									
Job status during union <sup>d</sup>	0.037	0.082*	-	-0.058	-	-	-	0.145*	0.029
Career progress during union <sup>d</sup>	-0.090	-0.043	-	0.068	-	-	-	0.023*	-0.100
Union duration	-0.000	0.008	-0.042***	0.025***	0.022***	0.007	-0.006	-0.005	0.019
Married before separation	-0.325	5.180**	3.583*	-2.389	0.344	5.153***	-4.839	2.853	6.453*
<i>Selection effect</i>									
Selection effect (- Lambda)	-2.056	-4.089	3.877	-1.696**	-3.257	4.953***	-0.227	3.617	4.806
Chi-square (df)	1,238(19)***	5,367(19)***	1,880(19)***	1,756(19)***	13,938(20)***	10,051(19)***	424(19)***	859(19)***	689(20)***
Sigma person level	7.091***	9.694***	10.694***	8.431***	11.504***	10.847***	12.124***	11.623***	12.393***
Rho	0.468***	0.584***	0.450***	0.469***	0.527***	0.499***	0.639***	0.464***	0.525***
N (first) separations	450	362	685	474	822	2,967	137	195	155
N person months	28,806	24,983	45,378	39,523	83,291	235,739	11,043	15,101	18,178

Unstandardized coefficients; \*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ , one-tailed tested; For each variable country differences are significant. This is tested by including interactions of the relevant variable with country in the pooled model.

<sup>a</sup> For Austria and Estonia, the dependent variable is dichotomous: whether women work or not after separation.

<sup>b</sup> For Austria and Estonia, this measure includes only the number of months women were employed (not their working hours) as a proportion of the union because the number of working hours were not asked.

<sup>c</sup> For Austria and Estonia, this variable is dichotomous: whether women work or not in the month before separation.

<sup>d</sup> Model including job status during union and career progress for selection of countries: FI, LT, CZ, HU, EDE, WDE, CH, SI, GR, ES.

Source: FFS (own calculations)

### Country differences

In Table 4.5 we show the work history effect for each country. The effects are controlled for the selection effect (for reasons of parsimony we leave out the interaction effect between work history and hours worked at the time of dissolution). We find a significant positive effect of work history during the union in eight countries and an insignificant positive effect in six countries. Hence, for most countries working more hours during the union results in higher working hours after separation for women. In addition, women's average job status during the union increases their post-separation employment in Finland, Germany, and Spain. Spain is the only country where career progress during the union leads to more post-separation working hours. Furthermore, union duration has a positive significant influence on women's post-separation employment in three countries and a negative effect in two countries. In seven countries we observe that women who were married before the separation work more afterwards.

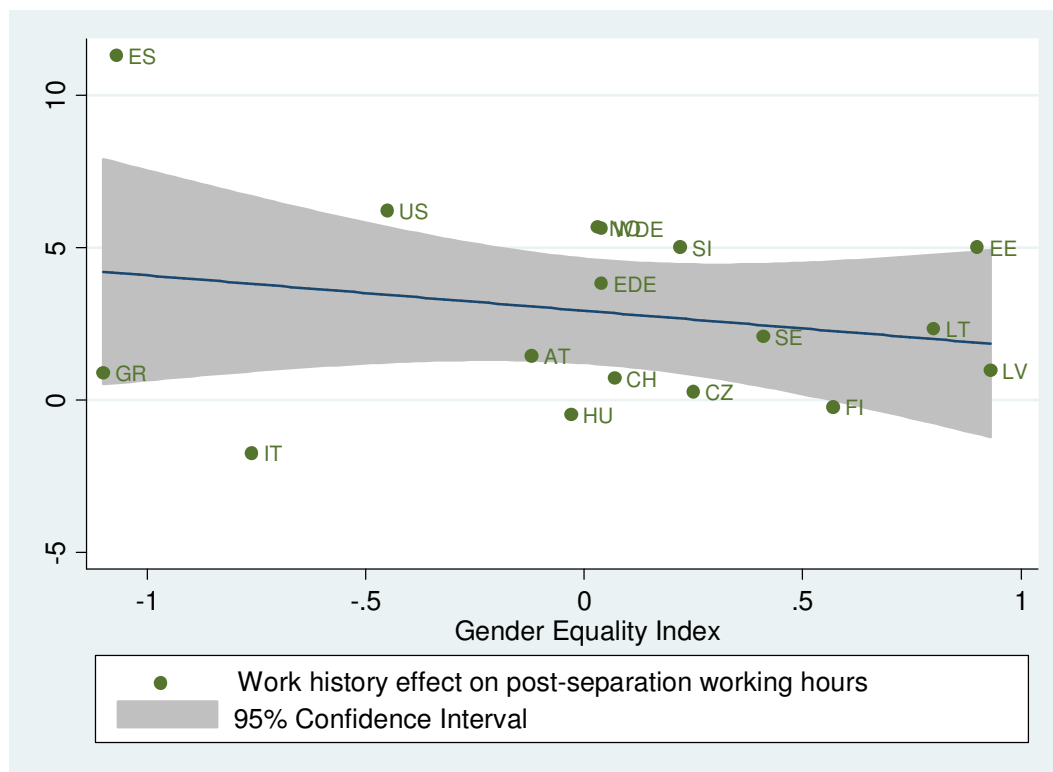


Figure 4.6  
Work history effect on women's post-separation working hours by degree of gender equality in a country.  
Source: FFS (own calculations)



To summarize, for most countries we found that work history during the union matters. For a few countries not only the employment history during the union is important, but also job status during the union, or making career progress. Although most effects are in the same direction, they differ in their magnitude. In Figure 4.6, we try to understand these differences in terms of gender equality in a country. The figure gives a first impression of the validity of our final hypothesis: The higher the degree of gender equality, the weaker the employment history effect on post-separation employment is. Indeed, the effect of women's work history on post-separation employment appears to be weaker in countries with more gender equality. An interaction effect of gender equality and women's work history using clustered standard errors is statistically significant. This supports our hypothesis and suggests that Becker's theory is less valid in egalitarian countries. The outlier analysis showed that the interaction effect is quite stable, regardless of the specific sample of countries. Finland (DFBETA = -0.79), Estonia (DFBETA = 0.71) and the US (DFBETA = -0.52) were found to be the biggest outliers, but excluding each of these countries did not affect the direction of the cross-level interaction (although the effect became insignificant when tested with clustered standard errors, which is a conservative test).

#### **4.5 Conclusion and discussion**

In this study, we advanced previous research in two ways. First, we performed a more direct test of the specialization theory by combining the literature on both the causes and the consequences of separation. We tested one of the theoretical mechanisms underlying the specialization effect on union dissolution by estimating the effect of women's work history *during* the union on women's employment *after* separation. In previous studies, the effect of women's employment on separation is often explained by the higher economic exit costs for women who were engaged in task-specialization during their partnership. According to economic theories of the family, task specialization – with men specializing in market-based tasks and women in home-based tasks – would be beneficial for marriage. As a result of this specialization, women's human capital depreciates during the union which may lead to lower employment chances after separation. Hence, women's work history during the union would determine women's risk of separation because it determines their post-separation

employment; women who worked more during the partnership have lower economic costs of exiting the union and thus will be more likely to separate.

Second, we tested to what extent the specialization hypothesis is valid in different societal contexts. Several scholars have already emphasized that the stabilizing effect of specialization for unions may depend on context. South (2001), for instance, showed for the US that the work effect on women's divorce risk varies across different historical periods. Furthermore, in a comparative study of nine countries, Blossfeld and Müller (2002/2003) demonstrated that specialization increases the stability of unions less in modern 'dual earner' societies. And in a critical review of the theoretical and empirical evidence of the validity of Becker's specialization theory, Oppenheimer (1997) argues that the theory of specialization might more apply in the traditional society of last century rather than in present-day US. Our central hypothesis was that in countries with more economic gender equality, women's economic exit costs of marriage would be lower; such countries have more employment opportunities and more institutional support to facilitate the combination of work and care. Although the comparative study of Blossfeld and Müller already hinted in this direction, South's cohort comparison in the United States found that employment effects on divorce were *stronger* in more egalitarian cohorts, which is in contrast to the above line of reasoning.

To investigate the reciprocal relationships between women's employment and separation, we used the Fertility and Family Surveys for 17 countries with 50,790 women and covering union histories of on average 20 years. We first replicated previous research on the effect of women's working hours on the risk of separation, then examined the effect of separation on women's working hours, and lastly assessed the effect of work history during the union on women's working hours after separation. We illustrated country differences in scatter plots and performed multilevel analyses to test these cross-national differences.

Our findings show that women's employment and separation are related and that the societal context matters. Consistent with the prediction of the specialization theory and with what most single-country studies so far have shown, we assessed that women's working hours significantly increase the risk of separation in 11 of the 17 countries. Moreover, in 16 countries, we found a positive effect of separation on post-divorce working hours, varying from increases around 0.7 hours in Norway to 7.5 hours in Switzerland. Finally, we found empirical evidence for the third hypothesis in eight countries. The more separated women invested in paid work during the union, the more hours they work after separation. For a subsample of countries (ten countries), we also tested effects of two other (non-)

specialization indicators – job status and career progress – and found significant positive effects for either one of these indicators in two countries.

In line with our expectations, we found systematic differences in the strengths of these effects among countries. In general, countries with more gender equality have weaker effects of women's working hours on separation than more traditional countries. This shows that the validity of Becker's theory depends on the context. In egalitarian countries, female employment is not (or is at least less) disruptive for unions. Another confirmation that Becker's theory has less validity in egalitarian societies is our finding that the effects of women's work history during the union on post-separation employment are weaker in more gender egalitarian countries. A third, but unexpected, finding is that the effect of separation on women's working hours is lower in more gender equal countries than in traditional countries. We had expected to find stronger separation effects the more gender egalitarian the country is and this is an indication that there still might be selection at stake which we were not able to control for. In general, however, our findings clearly suggest that prevailing economic hypotheses about marriage and divorce are more applicable to settings in which gender roles are traditional. In more egalitarian settings, the focus should probably shift to other theories, for example, theories that focus on psychological or sociological mechanisms to explain the causes and consequences of union dissolution.

Some of our conclusions should be taken with caution. An initial criticism of our study may be that the economic exit costs can also be measured by income levels after separation instead of working hours. Although women's post-separation employment and income are highly correlated (Smock, 1993), women may use other sources of income than employment, and this may be especially relevant in more gender equal countries where there is generous income support from the state like single parent allowances or alimony. Institutional support for divorced women may provide alternative incomes for women after union dissolution and thereby reduce the economic costs of separation and make an increase in post-separation working hours less necessary. However, we could not use an income measure because our life-history data, like most life-history data, have no retrospective income information. A second limitation of this study could be that our results are to some extent sensitive to the countries that we are analyzing. We checked this using outlier analyses, and – apart from the analysis on the effect of separation on women's working hours – the cross-level interaction effects turned out to be fairly stable with only one or two countries having large DFBETA's. An exception is the unexpected cross-level interaction effect in the analysis of the effect of union dissolution on working hours, which turned out to

be less robust. Finally, we note that the number of countries (17) is rather small to test macro-level hypotheses. For this reason, we also presented our results graphically and these graphs provide convincing supplementary supporting evidence. A remaining disadvantage, however, is that with a small number of countries it is not possible to test competing macro-level hypotheses or to examine *which aspect* of gender equality is most relevant. A possible alternative explanation of country differences in the validity of the specialization hypothesis is culture. In more gender egalitarian countries, women may prefer a more equal division of labour between husband and wife. Micro-level studies already showed weaker work effects on separation for women with more egalitarian gender role values. We could therefore also expect effects of the cultural dimension of gender roles on the employment effects on separation. Eastern European countries are in principle a good test case since they score high on the economic dimension of gender equality, but rather low on the cultural dimension. However, to test this convincingly, we need a simultaneous consideration of both dimensions. Including more than one macro-level indicator and more than one cross-level interaction will only be possible with a much larger number of countries.



## **Chapter 5**

### **Who Gains, Who Loses?**

#### **Social Class and the Economic Consequences of Separation for British Women**

##### **Abstract**

Although it is well known that the majority of women experience an income decline after separation, there is much heterogeneity in these income changes. The social class of the union women come from before the separation may explain variations in the economic consequences of union dissolution. Using the British Household Panel Survey (1991-2006), I find that there is an ‘underclass’ of separated women who are less likely to receive alimony and more likely to be on welfare. Although women from the lower classes experience the smallest income drop, they remain at the bottom of the income distribution. On the other hand, I find that the short-term income drop due to separation is largest for women coming from a white-collar worker union. However, while service class women recover pretty soon from their large income falls, women who had a spouse from the routine non-manual working class do not succeed to return to their pre-separation income levels. Possible explanations for these findings may be found in women’s economic dependence during marriage.

## 5.1 Introduction

Numerous studies on the economic consequences of divorce and separation have shown that the majority of women experience a large income drop after marital dissolution (e.g., Duncan & Hoffman, 1985; Jenkins, 2008; Smock, 1993). However, women are heterogeneous in how well they fare after separation<sup>1</sup>. Not all women experience the same large income fall and there is also a large group of women experiencing an increase after separation (see e.g., Jenkins, 2008). How can this heterogeneity be explained? In this chapter, I relate this heterogeneity to the type of union women come from before the separation and these different union backgrounds may cause different economic consequences. Hereby, I focus on the social class of the husband. Can differences in women's economic consequences of separation be related to differences in the social class of women's ex-partner, and if so, how?

In answering this question, I examine two indicators of women's post-separation economic position. First, I analyse the income sources women use after union dissolution and relate this to differences in women's union background. Apart from earning her own income on the labour market, separated women may receive support from various other sources: The state (Income Support), the ex-partner (alimony)<sup>2</sup>, or a new partner. Second, I investigate the short- and long-term income changes women experience due to separation. I describe to what extent women's absolute and relative income changes vary by the social classes of women's ex-spouse. In addition, these two ways of measuring women's post-separation economic position may be related; dependency upon others can be an indication of a bad financial situation. Therefore, I assess in a last step the relative importance of different income sources for women's income changes.

The contribution of this study to the literature is threefold. First, it fits in the field of social stratification and may add to the debate on the 'death of social class'. Although scholars have argued that social class as a determinant of life chances is decreasing (Beck, 1992; Pakulski & Waters, 1996), there are also indications that social class is still important in determining women's economic position in the British society (e.g., Goldthorpe & McKnight, 2006). In contrast with the majority of studies on social class I do not examine the influence of women's parental background, but that of the partner during the union. Moreover, I go one step further and examine to what extent the social class of the partner is

---

<sup>1</sup> I will use the term separation to refer to dissolutions of both marriages and cohabitations. In the text I will use marriage and partnerships interchangeably, as well as the terms marital and union dissolutions.

<sup>2</sup> The term alimony refers to both alimony for the woman and child support for the child. I use the terms alimony and child support interchangeably. The data I use in this chapter does not allow me to distinguish between the two, but alimony payments for the woman are rare.

related to her position even *after* the union has dissolved. Hereby, I build upon the ‘conventional’ view in social stratification research – of which Goldthorpe (1983) has been an important defender – which assumed that the social class of the male head determines the position of its family members in the social hierarchy and thus women’s economic life chances during marriage. The influence of the socio-economic position of the husband is also acknowledged by scholars in favour of the ‘joint classification model’ (Britten & Heath, 1983) and those studying partner effects on labour market outcomes (e.g., Brynin & Schupp, 2000; Verbakel & De Graaf, 2009). Although this ‘conventional’ approach seems old-fashioned and has been criticised by many – especially feminists (e.g., Acker, 1973; Stanworth, 1984; Szelenyi & Olvera, 1996) –, I believe that in addition to a woman’s own position in society, the social class of her partner contributes significantly to her economic life chances. After all, the majority of British women is still to some extent financially dependent upon their husband (Arber & Ginn, 1995) in spite of the growing female labour force participation the last decades. Some would even argue that a woman’s real position in the income distribution is hidden when she is married, and that her true position is revealed once she is divorced because then her standard of living depends only upon her own economic sources (Smock, Gupta, & Manning, 1999). Divorce can thus be considered as a factor stirring up the income distribution among women because it results in downward mobility for many women. The abound presence of divorce in the British society makes divorce an increasingly significant determinant of social inequality among women from different social classes.

Second, this chapter links together two lines of research: the field of social stratification and that of life course research. While research on social mobility focuses on the effects of social class on women’s economic life chances, such as income and poverty (Goldthorpe & McKnight, 2006; Savage, 2000; Vandecasteele, 2010), life course studies point to the importance of life course transitions for several – social, cultural, but also economic – outcomes of women during their life. This strand of literature assumes that important life events – such as marriage or the birth of a child – are anchors that channel individuals through different life paths of economic well-being. Divorce is such an event and it is found to have a negative income effect for women because of the loss of the husband’s income, especially for women from male-breadwinner households, and the loss of economies of scale (e.g., housing expenses cannot be shared any longer) (Holden & Smock, 1991).

The third contribution of this chapter deals with the variety of income sources separated women may have. So far, not many studies have analysed these different income



sources together with the consequences for women's income changes after divorce. From the literature on welfare dependency of single mothers it is known that piling up different income sources is a frequently used strategy for women to increase their income from welfare or low-wage work (Edin & Lein, 1997; Rainwater, Rein, & Schwartz, 1986). Studying the income packages of single mothers in three countries – the UK is one of them – in the seventies, Rainwater et al. (1986) already acknowledged the importance of changes in the family structure for changes in women's income packages due to variations in preferences and needs over the life cycle. I will contribute to this research by examining the receipt of income from four sources: alimony, welfare, employment, and a new partner. Hereby, it has to be taken into account that some of these income sources can be combined while others cannot. Moreover, some income sources may alleviate women's income fall due to divorce more than others. There is a large body of studies in which it is found that women on average decrease their income after divorce (e.g., Dewilde & Uunk, 2008; Duncan & Hoffman, 1985; Jenkins, 2008; McKeever & Wolfinger, 2001; Poortman, 2000; Smock, 1993; Uunk, 2004). Of these studies, only a few have examined the relationship between certain income sources on the one hand and on the other hand women's post-divorce income or income change around separation. I know of only one study (McKeever & Wolfinger, 2001) that investigated the effect of alimony and two that studied the effect of welfare benefits (and other social transfers) (Corcoran, 1979; Dewilde & Uunk, 2008). More research is done about the effects of repartnering (Bouman, 2004; Dewilde & Uunk, 2008; Duncan & Hoffman, 1985; Fokkema, 2001) and employment (Bouman, 2004; Bradbury & Katz, 2002; Corcoran, 1979; Dewilde & Uunk, 2008; Duncan & Hoffman, 1985; Fokkema, 2001; McKeever & Wolfinger, 2001; Smock, 1993) on women's income after separation. I will add upon this literature by studying the importance of all of these income sources for women's income changes due to separation.

To explore social class differences in women's economic consequences of separation, I use 16 waves of the British Household Panel Study (BHPS) (1991-2006). In this long-running panel approximately 5,000 households and 10,000 individuals are interviewed each wave. My sample includes 8,863 partnered women of which 923 are separated.

## 5.2 Theoretical considerations

To what extent can we expect a relationship between women's post-separation economic position and her ex-spouse's social class? To answer this question, I first consider arguments about women's economic dependence upon their husbands within marriage. Then I discuss some expectations about how the social class of the ex-spouse may be related to the wife's post-separation financial situation. Because explanations of repartnering (De Graaf & Kalmijn, 2003; Dewilde & Uunk, 2008; Lampard & Peggs, 1999) and post-separation employment (Johnson & Skinner, 1986; Peterson, 1989; Van Damme, Kalmijn, & Uunk, 2009) have been studied more often already, I focus this chapter on the income sources alimony and welfare receipt.

### 5.2.1 Social class and women's economic dependence

Goldthorpe (1983) argued in a much debated piece that the family rather than the individual forms the unit of analysis in social stratification research and that it is the occupation of the male head which defines the family's position in the stratification system. 'The family is the unit of class "fate", determining all family members economic life chances' (1993: 233) as Erikson and Goldthorpe state in their well-known book *'The Constant Flux'*. While they were only referring to women's economic position *within* the marriage, there might also be reasons to expect an effect of spouse's social class on women's economic situation *after* the marriage; women's economic life path after union dissolution may be affected by her former spouse's social class. One of the main arguments in favour of their approach was that women's employment is often unstable and discontinuous, whereas for their husbands it is not. If his social class determines her future life chances, do her chances then change immediately after the union has been dissolved? Or does the economic dependency of women upon their husband's social class during the marriage continue even after the union has been dissolved?

Goldthorpe's conventional approach has been criticized for being 'old-fashioned' by pointing to the rising economic independence of women the last decades. Feminist sociologists (e.g., Acker, 1973; Stanworth, 1984; Szelenyi & Olvera, 1996) disagreed with him arguing that women's own careers may have become more important for their life chances than their husband's jobs. Although many important changes reflect the rising economic independence of women in the British society, such as the growth in women's labour force participation rates, the rise in social security benefits for women and the increasing number of women with liberal attitudes over time, there is also evidence that the

majority of women is not economically independent in the UK. For instance, Arber and Ginn (1995) found that in 1990 (the start of my observation period), 79 per cent of British married women were still to some extent financially dependent upon their husband.<sup>3</sup>

### *5.2.2 Social class and women's economic position after separation*

What are the possible mechanisms explaining the association between the ex-husband's social class and his wives' post-separation economic position? Overall, British scholars have found the most marked distinctions in individual's economic life chances – in terms of income – between the social class of professionals and managers, the intermediate class, and the working class (Crouch, 1999; Savage, 2000). Are the differences in the economic consequences of divorce also the most pronounced between women coming from a professional/managerial class couple (to which I will refer as the service class) on the one hand and on the other hand the manual (the working class) and other classes (the intermediate class)? There are three reasons to expect this. The first reason is related to income effects, the second to the gap between life style aspirations and economic resources, and the third to women's adherence to economic dependence during the union. I will also formulate expectations for women who had a long-term unemployed ex-spouse and thus cannot be classified into a social class.

Firstly, the ex-husbands social class may be an indication for his (permanent) income and his income indicates the amount of alimony he can pay in theory, as well as his ex-wives' eligibility for welfare after separation. A husband's income before separation has been found to positively affect women's alimony award after separation (Beller & Graham, 1985; Bradshaw & Skinner, 2000). Since the service class has on average higher incomes than the lower classes and the long-term unemployed (Goldthorpe & McKnight, 2006), I expect that separated women with an ex-partner from the service class are more likely to receive alimony than women with a lower class ex-partner. Fathers who were unemployed for a long period before the separation will be the least likely to pay alimony, although they are not disregarded from payment like fathers on welfare are (Skinner, Bradshaw, & Davidson, 2007). I expect ex-wives from long-term unemployed and working class spouses to be more likely to receive welfare after separation than service class and intermediate class wives. In this respect, the 'welfare trap' is relevant, meaning that women with low qualifications and poor labour

---

<sup>3</sup> Author's own calculation: 32 per cent of married women were not working, 30 per cent were working full-time and 33 per cent part-time. Of the women who were working 56 per cent of those working full-time and 90 per cent of those working part-time were in a couple where the husband earned more than the wife. For  $32 + 30 \cdot 56 + 33 \cdot 90 = 79$  per cent of the couples, the husband earned more than his wife. Even though this figure does not indicate the size of the income difference between spouses, it still shows to what extent women rely on their spouses for income.

market perspectives may be financially better off on welfare because of welfare-specific benefits, the unattractiveness of poor quality jobs, and the better facility to combine work and care compared to having a (full-time) low income job (Harris, 1993; Hofferth, Stanhope, & Harris, 2005). When it comes to income changes, I expect that women from a service class couple will experience the smallest (relative) income drop and women from the working classes the largest because welfare benefits are in general lower than alimony.

A second mechanism explaining possible social class differences in divorce consequences concerns the relative size of the income drop and the gap between aspirations and resources related to that. The ex-husbands' social class may be an indication of the life-style aspirations women have and it may function as a socio-economic reference group (Oppenheimer, 1979). The higher his social class, the more expensive women's consumption pattern might be, the larger the gap between her aspirations and economic resources, and thus the more likely she will have to work after the separation in order to maintain her standard of living. Therefore, I expect that, net of the above described income effect, women who were in a 'service class couple' experience larger income falls than women from 'lower class couples'; they simply have more to lose. In contrast, women with a long-term unemployed ex-partner will be the least likely to experience an income drop since their situation cannot deteriorate much anymore (bottom effect).

Thirdly, his social class may be an indication of her status position in society, her commitment to work, and her adherence to economic independence. During the union a woman's social standing is derived from the social class of her family (mostly based upon the occupation of her spouse) and the type and quality of her job may matter less. However, after the union has been dissolved, a woman can derive her status only from her own occupation. A small, poor-quality job may then reflect a lower social position in society compared to the position she had when she was still in a union. For many women, becoming a housewife and reliance on other income sources than labour income may then be more attractive than remain working because this provides them with more status.

Women's work commitment, gender role values, and attachment to economic independence are related to this. Service class wives may be more ambitious, have a higher work commitment, and have more egalitarian gender role attitudes than wives with a husband belonging to any of the other social classes (Hakim, 2000) – under the assumption of

homogamy.<sup>4</sup> They may consider it more important to be economically independent during the union and will want to continue this economic independence after the separation by earning their own income and not relying on their ex-spouse or the state for income (which would probably provide them with a lower income anyway).<sup>5</sup> Women with an ex-spouse from the working class, on the other hand, may be less likely to be employed after separation than service class women because they are more likely to have worked out of economic necessity than out of ambition and adherence to egalitarian gender role values (Cloin, 2010).<sup>6</sup> Since they mainly qualify for poor-quality jobs, work does not provide them with intrinsic rewards and social standing. To them not work itself but providing their families with a higher income may matter more. Finally, I expect that those who had a spouse from the intermediate social classes will be the least likely to be working after separation because they may have been more likely to withdraw from the labour market during the union as soon as they could afford it. Being a housewife may have provided them with a higher social standing in society than having a (low or intermediate level) job (Oppenheimer, 1977) – assuming that women's job status hardly ever exceeds that of their husbands' – and their work commitment may be lower than that of working class wives. I expect these women to be highly economically dependent upon their husbands during the union and have few work experience which decreases their labour market chances after union dissolution and increases the need for alimony.

In sum, I predict that service class and intermediate class women will be the most likely to receive alimony payments, whereas working class wives and those with a long-term unemployed ex-spouse are the most likely to live on welfare after separation if they do not have paid work. Although service class wives may get more often and higher alimony payments from their ex-spouses, they can also experience the largest income fall, which increases their economic need to work. Additionally, they will be the most economically independent and career oriented women who intrinsically like their work and prefer to rely on their own income after separation, whereas working class women may be more likely to have poor quality jobs and they may more often work because of the extrinsic rewards. For them, the welfare trap may be relevant. Women who had an ex-spouse from the intermediate classes will be the most likely to rely on others for their income after the separation.

---

<sup>4</sup> I assume that highly qualified women are more likely to have a partner of the service class (homogamy). Hakim (2000) has shown that highly qualified women have more egalitarian sex-role ideologies and higher work aspirations than those who have lower educational levels.

<sup>5</sup> Note that women with an own labour income are often not eligible to receive welfare benefits.

<sup>6</sup> Low educated women more often have an instrumental work orientation than higher educated women (Cloin, 2010).

### 5.3 Data, method, and measures

#### 5.3.1 Data

I use the British Household Panel Survey (BHPS), which includes information on – among other things – income sources, employment, social class, education, and life-course variables. The BHPS is an annual survey which started in 1991 with about 5,500 households containing approximately 5,000 women. It is representative for the British population in private households. I analyse the first 16 waves (1991-2006) of this prospective longitudinal panel. In the course of the panel, extension samples of Scotland, Wales, and Northern Ireland were incorporated, but I only analyse the original sample. For more information about the BHPS, see <http://www.iser.essex.ac.uk/survey/bhps>.

My sample consists of 8,863 partnered women between the age of 18 until 65 of whom 923 are separated. Separation is defined as a transition from being married or cohabiting in one wave ( $t_{-1}$ ) to being single or living together with another partner in the next wave ( $t_0$ ). Although I have information of women's full retrospective union history, I only analyse separations during the panel period of 1991-2006, but women may have been separated already before this observation period. Therefore, I include the number of previous partnerships, which I could derive from the family history file (Pronzato, April 2007). For simplicity, I only include first separations during the panel period and exclude prospectively observed higher order separations. Widows are excluded as well. I observe a period of on average 6.4 years after separation.

#### 5.3.2 Method and measures

After describing social class differences in post-separation (1) receipt of different income sources and (2) income changes, I perform two groups of multivariate analyses. In the first group of models, I relate the social class of the ex-spouse to women's odds of receiving a certain income source after separation in a given year. I perform random effects logistic regression analyses for four dependent variables: (1) alimony and child support receipt<sup>7</sup>; (2) receipt of welfare benefits<sup>8</sup>; (3) being employed<sup>9</sup>; (4) having a new partner. In the BHPS respondents were asked to tell which types of income payments (shown on a card) they

<sup>7</sup> I cannot distinguish between alimony for the children (child support) and alimony for the wife herself because this is not asked for in the BHPS.

<sup>8</sup> Welfare benefits refer to means-tested social security benefits for those unavailable for full-time work, i.e. receipt of Income Support (IS). Unemployment Benefits and (contribution-based) Job Seekers Allowance (JSA) – which replaced the Unemployment Benefit (UB) and IS for unemployed jobseekers from October 1996 – are not included in the measure because they are not means-tested.

<sup>9</sup> In the BHPS it is asked whether the respondent did any paid work last week.

received since September 1st last year. When analyzing the receipt of alimony or welfare, I therefore always skip the wave directly observed after the separation took place in order to be sure that the income source women refer to was received while she was not living with her spouse anymore. For each women, each wave after separation is a separate record and I control for dependency between multiple observations per woman using a random effects approach. Note that my aim is to investigate the use of certain income sources at each moment in time after the separation and not the mobility (entry and exit) in the receipt of each income source. Take also account of the fact that women in theory can combine income from all sources, although welfare is rarely combined with alimony, full-time work, or repartnering because income from other sources are deducted from Income Support (Bradshaw & Skinner, 2000) – apart from a small amount. I choose not to perform multinomial logistic regressions on various income packages because then it is difficult to unravel which type of income sources is affected. In the analyses, I do control for receipt of income from any of the other sources.

The main independent variables in this analysis are the social class of the ex-partner and the employment status of the ex-partner. I measure the *social class of the ex-partner* at the time of union dissolution using the five-class division EGP scheme (Erikson & Goldthorpe, 1993: 38-39). I leave out farmers and agricultural labourers due to the low number (8) that separate during the observation period. Because I expect to find significant differences between the service class and the routine non-manual working class, I split the white-collar class into two classes as in the seven-class version. Hence, I compare the following classes: (1) Professional/managerial (I + II); (2) Routine non-manual (III); (3) Petty bourgeoisie (IV); (4) Skilled workers (V + VI); (5) Non-skilled workers (VII). Ex-husbands without a job are coded according to their previous job, whereas those who were unemployed for a period of at least three years were classified as long-term unemployed. The employment status of the ex-partner is a dummy measuring whether the ex-partner was *unemployed* while the couple was still together. Hence, the effects of unemployment of the ex-spouse can be interpreted as unemployment effects compared to the previous social class ex-spouses belonged to.

Further, I include the following variables: women's employment status just before separation, her education (using the six official National Vocational Qualifications levels), her ex-spouse's income just before separation (usual monthly gross wage), her age at separation, the age of the children in the post-separation household, and the duration after separation (in years). I also include a dummy for whether the separation took place after 1998

to control for period effects. In 1997, New Labour introduced all sorts of policies aiming at promoting women's employment (and that of lone mothers in particular) and reducing child poverty. The most important ones were the introduction of the Working Families Tax Credit (WFTC) in 1999 and the New Deal for Lone Parents in 1998 which was a welfare-to-work scheme encouraging lone parents on welfare to participate on the labour market (Finch, 2008; Gregg, Harkness, & Smith, 2007). Although simultaneously the Income Support amounts were increased in order to fight poverty among poor single parent families (which may form a disincentive to start or remain working), I expect that women's employment after separation is higher in the post-1998 period than before 1998. Despite the fact that during the BHPS panel period there were also changes in the child support system, I do not consider them to be important for my analysis. The British Government tried to improve and simplify the working of the system by a New Bill in 2001, thereby aiming at a reduction of non-compliance of child support payments by non-resident fathers, but according to Bradshaw and Skinner (2000) the implementation failed and compliance rates did hardly increase.

In the second group of models, I study the association between the ex-partners' social class and the different income sources on women's long-term income change after separation. I use a fixed effects approach on the person-year file to cancel out unobserved time constant differences between individuals. The dependent variable is *disposable income* in a certain wave corrected for household size and economies of scale using the OECD-modified equivalence scale and deflated for 2008 price levels. This is the total cash income (expressed in pounds per week) from all sources (income from employment and self-employment, investments and savings, private and occupational pensions, and other market income, plus cash social security and social assistance receipts and private transfers (e.g. maintenance)) minus direct taxes (income tax, employee National Insurance Contributions, local taxes such as the community charge and the council tax) and occupational pension contributions. The time period over which current income components are measured is the month prior to the interview or the most recent relevant period (except for employment earnings which are 'usual earnings'). For more information on the income measure, see Levy and Jenkins (2008). Note that in the fixed effects models, I use the post-separation income at a certain wave ( $t_x$ ;  $x < 0$  and  $x \geq 0$ ), whereas in the bivariate descriptive tables, I present both absolute and relative short-term income changes. *Absolute income changes* are measured by subtracting the disposable income of the household of the woman in the wave after separation ( $t_0$ ) from the disposable household income of the woman in the wave before the separation



( $t_{-1}$ ). *Relative income changes* are the absolute changes divided by the pre-separation income (and multiplied by 100 per cent).

## 5.4 Results

### 5.4.1 Descriptives: Income changes due to separation

To what extent is there heterogeneity in the economic consequences of separation for women? While women on average experience an absolute income drop of £49 per week – corresponding to a relative drop of 18 per cent – there is considerable individual variation in income changes around separation. This heterogeneity in income changes is illustrated in Figure 5.1, where the cumulative distribution of the relative income changes is presented.

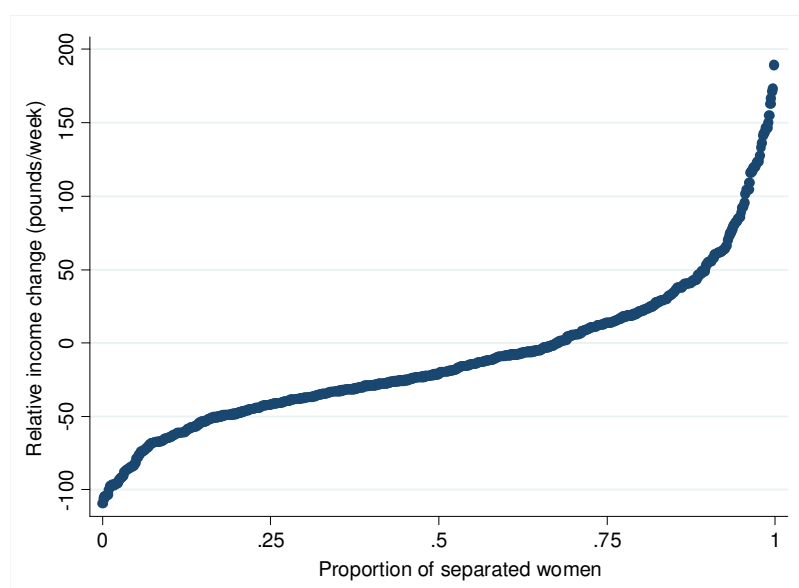


Figure 5.1

Cumulative distribution of women's relative change in adjusted weekly household income between the wave before ( $t_{-1}$ ) and the wave just after ( $t_0$ ) separation.

Source: BHPS, 1991-2006 (own calculations)

The figure shows that although the majority of women experience an income fall (66 per cent), there is also a substantial group of women (34 per cent) who experiences an income increase. Half of the women have a relative income decrease of at least 19 per cent.

Table 5.1  
Income sources of women in the year after separation (measured in wave  $t_{+1}$ )

	Alimony	Welfare	Work	New partner	Other
All	18	27	65	23	6
<i>Social class of ex-spouse</i>					
Professional-managerial (I + II)	27	11	79	22	6
Routine non-manual (III)	29	35	61	29	2
Petty bourgeoisie (IVa + IVb)	14	23	73	25	4
Skilled worker (V + VI)	19	28	62	25	7
Non-skilled worker (VIIa)	13	39	57	21	5
Long-term unemployed	4	49	42	20	14

Source: BHPS, 1991-2006 (own calculations)

#### 5.4.2 Descriptives: Income sources after separation

Table 5.1 presents the percentage of women receiving each of the four income sources one year (wave  $t_{+1}$ ) after separation. As expected, I find that the majority of separated women work and only a minority of the separated women receives alimony (18 per cent) or state benefits (27 per cent). Repartnering shortly after separation is not rare. About 23 per cent has a new partner one year after the union dissolved. Note that there is overlap between the sources affirming that piling up different income sources is used as a strategy to make a living. For instance (figures not shown), three fourth of the women receiving alimony are also working, whereas one fourth is combining it with welfare.<sup>10</sup> Alimony turns out to be insufficient to make ends meet; for only two per cent alimony is the only income source. Work and welfare are less frequently combined. About one fifth of the women receiving Income Support (IS) have a job and this is most of the time a part-time job of 16 hours or less. In the long term alimony and welfare receipts are reduced and women more often have a new partner who may support them financially (Figure 5.2).

#### 5.4.3 Union background and women's post-separation income sources

To what extent does the social class of the ex-spouse differ in the odds of receiving certain income sources after separation? The descriptive figures in Table 5.1 partly confirm my expectation that the main distinction between social classes is to be found between women with an ex-partner belonging to the professional/managerial class and those with an ex-partner from the other classes. Women from the service class are the most often employed and the least often living on welfare compared to women with other union backgrounds. As expected, alimony is most frequently received by women with ex-spouses from the higher

<sup>10</sup> Note, however, that the combination of alimony and welfare does not increase women's incomes much since women are only allowed to have a small amount of income from other sources in order to remain eligible for IS (Bradshaw & Skinner, 2000).

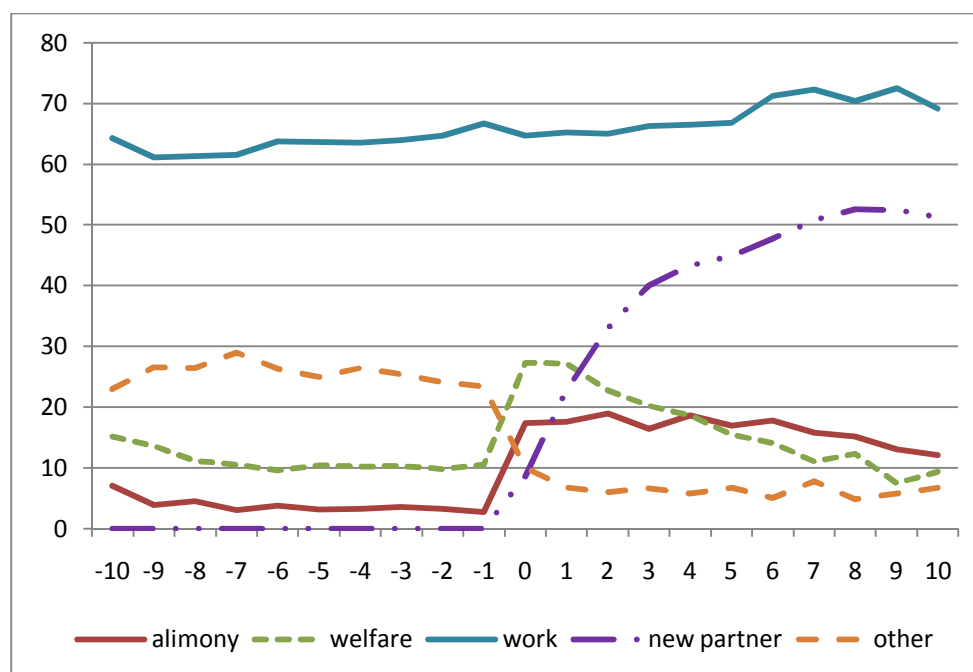


Figure 5.2  
Separated women's income sources in the years before and after separation.  
Source: BHPS, 1991-2006 (own calculations)

social classes. The manual working classes and the long-term unemployed receive alimony less often and are more likely to be dependent upon welfare. Salient is the high percentage of IS receivers among routine non-manual worker wives.

These social class differences remain after controlling for alternative income sources and women's socio-economic and demographic characteristics in random effects logistic regression analyses (Table 5.2). Women who had a partner belonging to the higher social classes are more likely to receive alimony than women from other social classes. Next to women with an unskilled worker ex-partner, those with an unemployed ex-partner and those from the petty bourgeoisie have the lowest probabilities to get alimony payments after separation. The effects are large: women with an ex-spouse from classes I to III are at least 4 times [ $\exp(1.454)$ ] more likely than unskilled worker class women to receive alimony after union dissolution and women with a skilled worker as ex-husband 3 times. Overall, the social class differences are significant. Yet, the difference between service class, the routine non-manual class and the skilled workers is not significant.

Looking at the differences in welfare receipt, I find that especially women from the service class are less likely to live on welfare benefits after separation. Not surprisingly, separated women having an ex-partner who was unemployed just before the separation are the most likely to receive state benefits. It is remarkable though that there also remains to be a

high probability to receive IS for women having had an ex-spouse from the routine non-manual class. For these women, the odds of receiving IS are significantly higher [ $\exp(1.651)=5$ ] than those for women with an ex-spouse from the service class. The relatively low probability of welfare receipt for wives who had a long-term unemployed ex-spouse is due to the fact that I control for employment status of the ex-spouse at the time of separation.

Table 5.2  
Random effects logistic regression analyses on the odds of different income sources for separated women

	Alimony	Welfare	Working	New partner
<i>Social class of partner before separation</i>				
Professional-managerial	1.454**	-0.907*	0.261	-0.050
Routine non-manual	1.591*	0.744	-0.246	0.331
Petty bourgeoisie	-0.470	-0.009	0.561	0.498
Skilled worker	1.171*	0.179	0.030	0.688
Non-skilled worker	-	-	-	-
Long-term unemployed	0.529	-0.923	-0.114	0.283
Unemployed (ref=previous job)	-2.297***	1.377***	0.045	-0.141
<i>Alternative income sources</i>				
Alimony		0.079	0.241	-0.326
Welfare	-0.379		-3.306***	-1.857***
Working	0.190	-3.692***		-0.638***
New partner	-0.220	-1.920***	-0.810***	
<i>Other variables</i>				
No child	-	-	-	-
Youngest child 0-3	0.392	0.386	-1.874***	-1.349***
Youngest child 4-6	0.434	1.260***	-0.785***	-3.397***
Youngest child 7-11	0.440	1.315***	-0.568**	-4.180***
Youngest child 12-15	1.266***	0.813*	0.305	-3.966***
Employed before separation	-1.013**	-1.670***	2.485***	0.032
Duration since separation	-0.129***	-0.256***	-0.062**	0.073***
Age at separation (centred)	0.053*	-0.049**	-0.042***	-0.106***
Age at separation (centred) <sup>2</sup>	-0.010***	-0.002	-0.005***	-0.005**
Separation after 1998	0.468*	-0.940***	0.208	1.830***
Constant	-5.119***	4.308***	2.801***	1.787*
Chi-square (df)	111 (25)***	369 (25)***	559 (25)***	416 (25)***
Sigma person level	3.277***	2.275***	1.952***	3.097***
Rho	0.766***	0.611***	0.537***	0.745***
N separations	619	619	666	666
N person months	3,850	3,850	4,562	4,562

Unstandardized coefficients; \*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ , one-tailed tested.

Models are controlled for educational level and the number of previous unions

Source: BHPS, 1991-2006 (own calculations).

Controlling for education and women's pre-separation employment,<sup>11</sup> social class differences in post-separation employment are cancelled out, suggesting that women's economic independence during the union is important for women's work after separation. Without this control, women with an ex-spouse from the service class or the petty

<sup>11</sup> Models without these variables are not shown, but can be acquired upon request.

bourgeoisie are significantly more likely and women with an unemployed ex-spouse are less likely to work after separation than women with an ex-husband from any of the other social classes. The difference between service class wives and routine non-manual wives in the odds to be employment is significant. As for repartnering, I do not find significant differences in the odds of repartnering between women with a different union background.

In sum, the most eye-catching findings are the following. First, there seems to be an underclass of women – those with an unemployed ex-husband – who have to rely on state benefits to make ends meet. For them, alimony and labour income are less frequently received incomes. Second, also women from a routine-manual working couple seem to be vulnerable: They more often have to rely on others (the ex-partner and the state) and seem to have more difficulties in earning their own living on the labour market.

I now briefly discuss some of the effects of the other variables, starting with the receipt of alternative incomes. The odds of receiving welfare are lower if separated women have other income sources like employment or a new partner. Striking is the very large effect of employment on welfare (odds= 0.02) since women on welfare are allowed to have a job of maximum 16 hours per week. The positive direction of the effect of labour income on alimony – although insignificant – seems to confirm that alimony and employment are not substitutes, but rather complementary income sources. Note that it is not possible to interpret these effects as causal effects because the decision to choose for a certain income source depends on the availability and eligibility of other income sources as well as on women's labour market perspective.

The negative period effect on IS receipt is in line with my expectation about the discouraging effect for women to enter and remain in welfare after the introduction of the New Deal for Lone Parents in 1998 in combination with the launch of the WFTC one year later. The positive period effect on women's alimony receipt is unexpected.

#### *5.4.4 Union background and women's income changes after separation*

The heterogeneity in union background also seems to be related to women's income changes after separation. Table 5.3 shows that both absolute and relative income drops are biggest among wives with service class ex-partners. My expectation about bottom effects for women with a long-term unemployed ex-partner turns out to be confirmed. The increase in income change for the unemployed has to be interpreted with caution, however, because losing a non-employed household member automatically increases her income because she doesn't have to

share her income anymore with another household member.<sup>12</sup> Additionally, it could be that welfare-specific benefits that go together with the receipt of Income Support alleviate non-working women's financial situation. These women may therefore be better off alone and living on welfare than with a spouse with whom they have to share his unemployment benefit.<sup>13</sup> Finally, there is also individual variation within these social classes as the percentiles of the distribution of income changes show (see columns six to eight).

Table 5.3

Average incomes and absolute and relative income changes in adjusted weekly household income of women in the wave before separation ( $t_{-1}$ ) and the wave just after separation ( $t_0$ )

	Pre-separation income	Post-separation income	Average absolute change	Average relative change	Lower quartile	Median	Upper quartile	N
All	267	218	-49	-18	-41	-19	+17	677
<i>Social class of ex-spouse</i>								
Professional-managerial (I + II)	388	258	-130	-34	-50	-28	-7	183
Routine non-manual (III)	265	218	-47	-18	-41	-26	+4	48
Petty bourgeoisie (IVa + IVb)	231	195	-36	-16	-44	-13	+32	69
Skilled worker (V + VI)	248	196	-52	-21	-43	-25	+14	127
Non-skilled worker (VIIa)	209	199	-10	-5	-37	-11	+23	120
Long-term unemployed	165	206	+41	+25	-23	+17	+79	46

Source: BHPS, 1991-2006 (own calculations)

These differences in union background hold in a fixed effects model which controls for all individual time-constant characteristics (Model 1, Table 5.4). Women with an ex-husband who has a professional or managerial job lose on average 22 per cent [ $\exp(-0.25)$ ] in income when they separate, whereas women with a routine non-manual worker as ex-spouse lose about 10 per cent. Again, I find that women with an unemployed ex-partner turn out to be better off financially after the separation than before; their income increases with 14 per cent.<sup>14</sup> Note that I also find – in line with Jenkins' (2008) finding – that the economic consequences of separation are less severe in the post-1998 period.

<sup>12</sup> This means that if the total household income of a married woman without children and an unemployed spouse (say £200) does not change due to separation, her income in the years during the union is equal to £118 ( $\text{£}200/(1 + 0.7)$ ), whereas after separation it is equal to £200. Hence, working women are financially better off without an unemployed spouse than with one.

<sup>13</sup> Note that the equivalence scale that is used can also influence the size of the income changes. I have redone all the analyses using the McClements equivalence scale instead of the OECD scale. The McClements scale assigns the value 0.61 to the first adult in the household, 0.39 to the second adult, and an increasing weight varying between 0.09 and 0.36 for children depending on their age. For the OECD modified scale the weights are: 1, 0.5, and 0.3 for children under age 14. When using the McClements scale, the household incomes are higher, but the income changes and the distribution of the income changes hardly differ. The figures in Table 5.2 thus do not change much.

<sup>14</sup> These differences become even larger when using the McClements equivalence scale.

Table 5.4  
Fixed effects OLS regression analyses on women's income [ $\ln(\text{£/week})$ ] before and after separation

	Model 1	Model 2
<i>Social class of partner before separation * separation</i>		
Professional-managerial	-0.252***	-0.251***
Routine non-manual	-0.111*	-0.101
Petty bourgeoisie	-0.085*	-0.094*
Skilled worker	-0.049	-0.066
Non-skilled worker (ref)	0.011	-0.413***
Long-term unemployed	-0.042	-0.030
Unemployed (ref=previous job)	0.134***	0.205***
<i>Income sources after separation</i>		
Alimony		0.143***
Welfare		0.181***
Working		0.457***
New partner		0.275***
<i>Time from separation</i>		
-6 years or more	-0.058*	-0.055*
-5 years	0.000	0.000
-4 years	0.039	0.040
-3 years	0.043	0.048
-2 years	0.132***	0.137***
-1 year	0.133***	0.139***
Year of separation	-	-
+1 year	0.065*	0.029
+2 years	0.176***	0.146***
+3 years	0.187***	0.122***
+4 years	0.239***	0.162***
+5 years	0.238***	0.177***
+6 years or more	0.356***	0.279***
<i>Other variables</i>		
No child	-	-
Youngest child 0-3	-0.232***	-0.149***
Youngest child 4-6	-0.229***	-0.152***
Youngest child 7-11	-0.222***	-0.153***
Youngest child 12-15	-0.106**	-0.062
Separation after 1998	0.053*	0.018
Constant	5.331***	5.330***
R <sup>2</sup> within persons	0.060***	0.112***
R <sup>2</sup> between persons	0.000	0.054***
Sigma person level	0.500***	0.482***
Rho	0.471***	0.477***
N (first) separations	923	921
N person months	8,863	8,408

Unstandardized coefficients; \*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ , one-tailed tested.

Source: BHPS, 1991-2006 (own calculations)

The long-term financial consequences for the different social classes are illustrated in figure 5.3. Note that although the incomes are corrected for inflation, women's incomes still increase over time due to normal career income growth. Resembling the figures in Table 5.3, women coming from a service class couple had the highest income levels before separation and they experience the largest income falls. However, their income remains higher and they also recover earlier than women from the lower social classes. The

relationship between social class and women's financial consequences of separation is thus more subtle when looking at the longer term consequences. Relatively, routine non-manual worker wives turn out to be worse off because their income situation deteriorates and they hardly recover in six years.

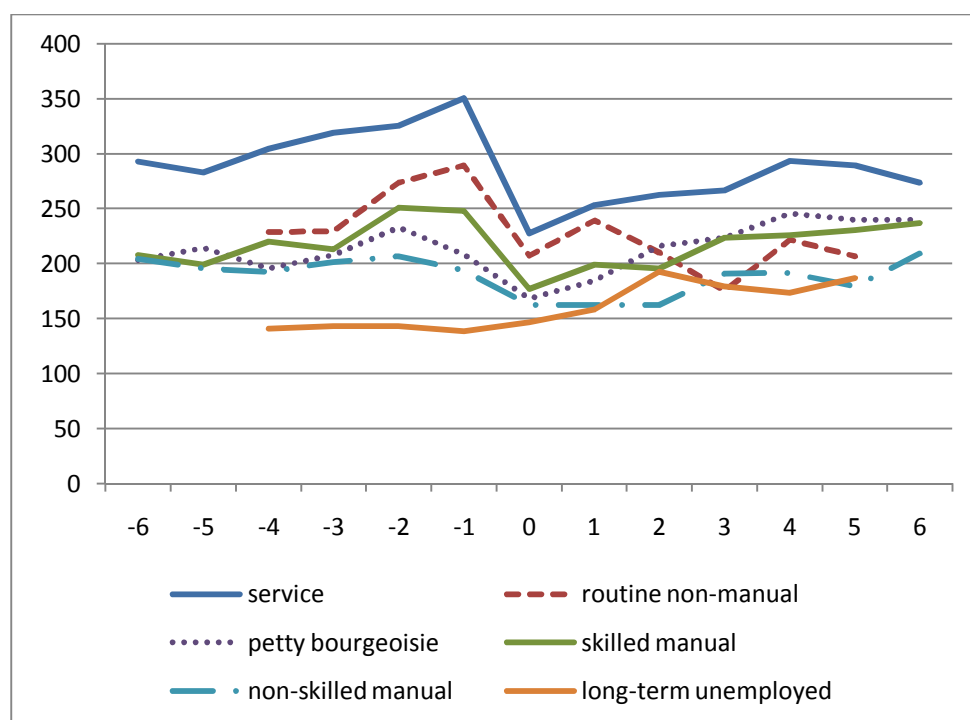


Figure 5.3  
Adjusted weekly household income (median) of women by social class from the ex-spouse before and after separation.  
Source: BHPS, 1991-2006 (own calculations)

These conclusions hardly change when taking time-constant differences into account. This is illustrated by Figure 5.4, which shows women's predicted income at six years before and six years after separation based on a fixed effects model with interactions between the ex-spouses' social class and the time from separation, as well as some time-varying variables (those in Model 2, Table 5.4). Remarkable is the relatively positive development in income for women with a skilled worker as ex-husband. Apparently, when certain time constant differences between skilled worker wives and service class wives (such as wives' education and work status) are controlled for, the differences in income changes between these two classes disappear.



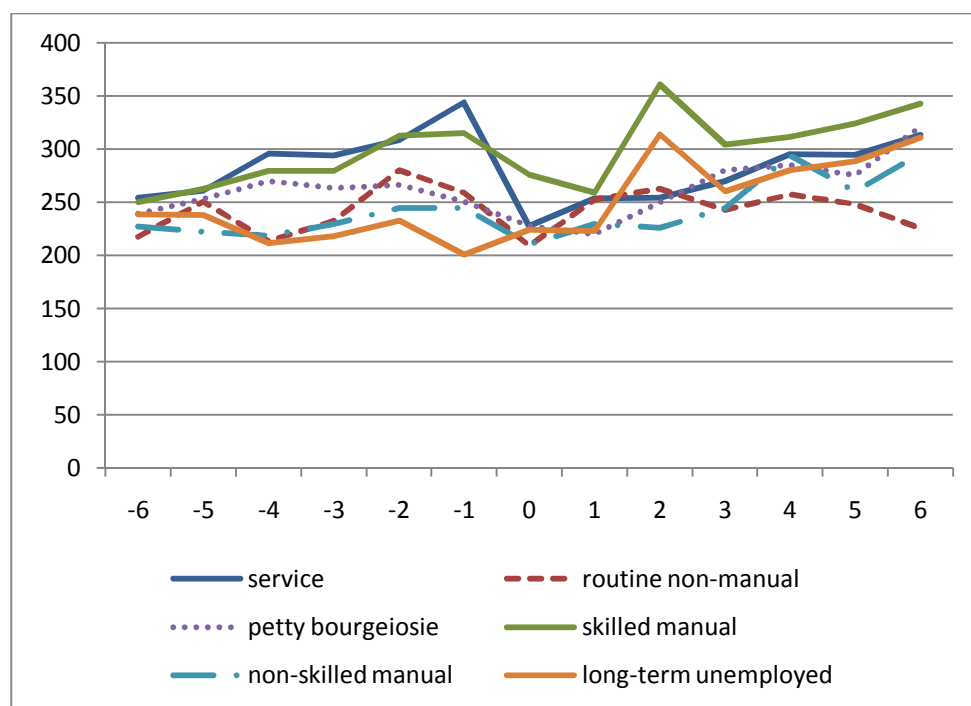


Figure 5.4

Adjusted weekly household income (average) of women by social class from the ex-spouse before and after separation, controlled for unobserved time constant differences.

Source: BHPS, 1991-2006 (own calculations)

#### 5.4.5 Income sources and women's income changes after separation

Is economic dependency upon others an indication of a bad financial post-separation situation? Each income source contributes to an alleviation of women's income drop due to separation, but working and having a new partner are better buffers against a negative income change than alimony and state benefits (Model 2, Table 5.4). Moreover, employment turns out to be the most effective in reducing the negative divorce consequences. If women start working after separation, their income increases with 58 per cent, whereas repartnering leads to an increase of 32 per cent. Alimony and welfare each contribute to women's post-separation income by an increase of at least 15 per cent. Note that the effect of IS is positive, whereas a negative effect could have been expected. When including only IS in the model, it is indeed negatively related to women's post-separation income ( $b = -0.085$ ,  $p = 0.029$ ), but after controlling for women's post-separation employment status the negative IS effect turns into a positive one.

## 5.5 Conclusion

In this chapter, I explored the relationship between the ex-partner's social class and women's economic consequences after separation. Using 16 waves of the BHPS, I related differences in women's pre-separation union background to differences in post-separation income sources and income changes and I found that there is an important distinction between women with an ex-partner from the service class and those with an ex-partner from the lower social classes. Service class wives experience the largest income falls, but they also recover earlier than wives with an ex-partner from lower social classes. The most important income sources of service class women are alimony and employment. Working class women, on the contrary, have the smallest income drops, but they remain at the bottom of the income distribution. They also more often depend upon the state for their income and (apart from the skilled worker wives) appear to be less likely to receive alimony. Salient is the finding that women who formed a couple with a routine non-manual worker are more likely to depend upon others to make a living after separation. The income loss they experience is large and reliance on others does not cushion this loss in the long-run. Finally, women with a long-term unemployed ex-spouse gain income after the separation. These women are financially better off after separation as their ex-husband did not contribute (much) to the household income.

Moreover, I tested the relationship between women's income sources after separation and their income changes and two important findings emerge. First, alimony and welfare do increase women's income after separation, but employment and repartnering are better strategies to cushion income loss. Alimony as a single income source is insufficient and it is most of the time complemented with market income. That alimony does not alleviate women's income drop after separation to a large extent may be due to non-compliance of fathers in paying alimony. The majority of fathers do not have a sufficiently high income to afford alimony payments, but some of the fathers may also have the desire to negotiate contact with their children, or prefer to provide informal support only (Bradshaw & Skinner, 2000). Second, employment turns out to be more effective in increasing women's post-separation income than repartnering. This is initially surprising since from previous research the opposite can be concluded (Bouman, 2004; Dewilde & Uunk, 2008; Duncan & Hoffman, 1985; Fokkema, 2001). Not all of these studies estimated the income effects of repartnering and employment simultaneously in a model, however. Those who did (Dewilde & Uunk, 2008; Fokkema, 2001; Jansen, Mortelmans, & Snoeckx, 2009) used a different model than I did. Their results may indicate that on average, repartnering is a more important coping

strategy for women because more women find a new partner than start working after separation (Bouman, 2004). Moreover, the group of women that find a new partner may be a selective group, namely those with better socio-economic characteristics (De Graaf & Kalmijn, 2003). If this selectivity is not good controlled for, the repartnering effect is overestimated. Using fixed effects models, I take selectivity in time constant characteristics into account. Hence, *ceteris paribus* – a woman may mitigate her income drop by employment more than by repartnering. It would be interesting to find out how much income exactly a new partner brings in. To what extent is the income of a new partner higher than that of women's ex-partner? Future research on homogamy and upward mobility among women who repartner is needed. In addition, having a new partner while remaining non-employed may be a double risk for women in the long run: The dissolution risk of second order unions is higher than that of first order unions and women reduce their labour market opportunities by not investing in their human capital during the relationship.

How can the social class differences be interpreted? I proposed three arguments: The ex-spouse's social class can be an indication of his (permanent) income determining his alimony payments; it can reflect her life style aspirations; and it can be related to her work orientations and adherence to economic independence. Future research has to empirically verify these arguments, but in any case the results seem to indicate that married and cohabiting women still are to some extent dependent upon their husbands and this dependence emerges in the economic consequences after separation that women experience.

A final conclusion is related to the debate on the 'death of social class'. Even though most women on average experience an income drop shortly after separation, in the long-term pre-separation social inequalities re-appear. This finding thus agrees with both parties in the debate. On the one hand, it seems that Beck (1992) and Pakulski and Waters (1996) were right when it comes to the short term economic consequences of separation; separation affects all women's economic position in society, regardless of their socio-economic position before the separation. On the other hand, my results are in line with the view of the defenders of social class as an important stratifier (e.g., Goldthorpe & McKnight, 2006) because pre-separation social class differences are reflected in women's post-separation economic situation in the longer term.

## **Chapter 6**

## **Conclusion**

## 6.1 Summary: Answers to the research questions

In this study, I examined the consequences of separation for women's employment in comparative perspective. It contributes to previous research by describing and comparing women's work after separation in different countries, investigating both short-term and long-term effects. To explain which women change their employment after separation and why, I have used an interdisciplinary approach, building upon theories from economic, sociological, demographic, and social policy perspectives. Previous research mainly focused on economic approaches. Moreover, and most importantly, I have used a multi-level framework to relate the institutional context to the consequences of union dissolution for women. To answer the research questions posed in this thesis, I used several micro-level data sets, and linked these to a variety of macro-level institutional indicators. Although the merit of this study is the relatively large number of countries, it is still difficult to assess the effect of institutions. I therefore used four different ways of measuring the impact of institutions on women's post-separation employment, applying a different approach in each chapter.

### *6.1.1 Women's post-separation employment and alternative income sources*

Chapters 2, 3, and 4 provide an answer to the first research question, which concerns a description of the impact of union disruption on women's employment. The picture that arises from the chapters is consistent: On average, European women increase their employment after a separation, but the increase is modest (about nine percent in the year after separation). This overall finding masks individual mobility in employment, comprising of 13 percent entry and eight percent exit. When focusing on women who were working just before the separation, I find that women hardly change their working hours just after splitting up.

Moreover – and of importance for the third research question on institutions which will be discussed later on –, the size of the employment change strongly differs among countries. Increases in employment are largest in the Netherlands, Denmark, and Italy, whereas in Ireland, Austria, Finland, and Greece women do not significantly change their employment. In the UK women on average even more often leave the labour market after separation than enter it. With respect to working women, I observe that women significantly increase their number of working hours after separation only in the Netherlands, which is not surprising considering the relatively flexible working hours scheme Dutch employers handle. Here, women may be able to adjust their working hours while remaining in the same job

fairly easily. An alternative explanation for the non-significant findings in the 12 other European countries studied is a ceiling effect. While in most countries the majority of separated women were already working full-time before separation and therefore could not increase their working hours more, many Dutch women could increase their working hours substantially after separation because they were only working part-time during the union.

While Chapter 2 and 3 zoomed in on separated women, Chapter 4 compared the employment changes of separated women with that of partnered women, providing better estimates of the separation effects on employment. Using fixed effects models, I find that in 16 of the 17 countries, separation positively affects post-separation working hours. Again, the magnitude of the separation effect strongly depends on the country, varying from increases around 0.7 hours in Norway to 7.5 hours in Switzerland.

Increasing their employment is not the only way women use to cope with the income loss due to a separation. They may use other strategies as well and the decision to change their employment is linked with having income available from other sources. I therefore investigated in Chapter 5 to what extent women have financial support from various others: the ex-partner, the state, or a new partner. As there is no cross-nationally comparable data set available (yet) to examine this issue, this Chapter is a case study of one country: the UK. In this country, in the first year after separation 18 percent of the women receive alimony, 27 percent receives Income Support from the state, and 23 percent has a new partner who may provide income.

How is receipt of other alternative income sources related to women's post-separation employment in various countries? The findings of Chapter 3, Chapter 4, and Chapter 5 suggest that an alternative income indeed decreases women's economic need to work. In Chapter 3, I find that having a new partner and co-residence with adult family reduces women's likelihood of labour market entry, although this only applies to countries with low income support. Both alternative income sources are also positively related to women's odds of leaving the labour market, suggesting that financial support from a new spouse or family may reduce the economic need to work and enable women to spend their time on caring for the children instead of working. The results of Chapters 4 and 5 point to the same direction. Separated women who repartner work on average less hours than those who do not live together with a new spouse (Chapter 4) and are less likely to be employed in the observed period (up to 14 years) after the separation (Chapter 5). Analyses of the long-term effects of separation in the UK (Chapter 5) also showed that separated women who receive welfare

benefits are less likely to be employed at a certain point in time. I did not find a significant effect of alimony receipt on women's post-separation employment.

Which income strategy is best to cushion the income loss due to separation? Although alimony and welfare do increase women's income after separation, employment and repartnering are better strategies to cushion income loss. In contrast to previous research, however, I find for the UK that employment turns out to be more effective in increasing women's post-separation income than repartnering (Chapter 5). The reason why my finding differs may be that most of the studies did not simultaneously model the income effects of repartnering and employment, and that those who did (e.g., Dewilde & Uunk, 2008) compared the effects for average women instead of using a fixed effects approach modelling. More specifically, employment may be a more secure and stable income source in the long-term as women who remain on the labour market continue to invest in their human capital. If they lose their job, they may be very likely to find a new one and secure their income. Non-working women who rely on their spouse for their income, however, run a double risk of income loss in the long-run. They might lose their partner and thereby lose their income, but they may also be less likely to find a (good quality) job if they need one because their human capital depreciated during the period in which they were not active on the labour market.

#### *6.1.2 The determinants of women's post-separation employment*

The individual-level explanations for women's employment changes due to separation were tested in Chapters 3 to 5. Approaches from economic, sociological, and demographic disciplines were combined, and the effects on women's post-separation employment were simultaneously analysed. More specifically, I investigated to what extent women's employment during the union, the socio-economic position of the ex-spouse, and four demographic characteristics contributed to women's employment after union disruption.

##### *Women's employment during the union*

Traditional task specialization within couples has turned out to be detrimental for women because the longer women are out of the labour force and the fewer hours they work, the more their human capital depreciates, and consequently the less likely they are able to increase their employment after separation. The sex-role specialization between spouses has been explained by both economists and sociologists, but the most famous one is the explanation of Gary

Becker, using the utility argument. According to Becker, women who specialized less in paid work during the union are expected to experience more economic exit costs when they separate, which is reflected by lower chances to enter the labour market and a smaller increase in working hours after separation. I referred to this expectation as the *underlying economic independence hypothesis*.

The findings are in line with the expected hypotheses derived from Becker's theory on the economics of the family. The more women worked during the union, the more hours they work after separation (Chapter 4). Women who worked fulltime all the time during the union work on average 3.5 hours more after separation than women who never worked during the union. This effect turns out to be especially applicable for women who were not working at the time of separation. For women already working when the union dissolved, no significant effects of work experience were found (Chapter 3). As expected, the magnitude in the effect of women's work history during the union on their post-separation employment differs significantly between countries. I come back to an explanation of cross-national differences in this economic independence effect later on.

In addition, I found that the higher women's job status and the more career progress they made during the union, the more hours they work after separation (Chapter 4). An increase in the average job status during the union of 1 standard deviation on the ISEI scale is associated with an increase of 0.79 working hours after separation. Finally, women who make 1 standard deviation more career progress during the union (an increase of 1 standard deviation in the measure of the total change in job status) work on average 0.22 hours more after the union has been dissolved.

### *The ex-spouse's socio-economic position*

Not only women's own employment history during the union matters, her relative dependence upon her spouse is of importance as well. I tested effects of the ex-spouse's income and of his social class on her post-separation employment. In Chapter 2, I estimated the effect of the spouse's income before the separation on women's employment after separation. Although his income does not turn out to affect her likelihood to enter the labour market after the union has been dissolved, it does explain her working hours changes, but inconsistently. Women with either a poor or a rich ex-husband are more likely to adjust (increase as well as decrease) their working hours than other women, but it is difficult to explain why this is so.



I do find a relationship between the ex-spouse's social class and separated women's employment and other income sources (Chapter 5). I proposed that his social class is related to her adherence to economic independence during the union and her preference to work and expected that this had to do with ambition, the extent of intrinsic work motivation, and the extent to which women can derive status from their jobs.

Initially, I find that women's post-separation employment is related to her ex-spouse's social class. Separated women with an ex-husband belonging to the service class or the petty bourgeoisie have higher odds to be employed, whereas those with an unemployed ex-spouse work significantly less often. The last group of women, together with those who formed a couple with a routine non-manual worker, appear to be more likely to depend upon others (the state and the ex-partner) to make a living after separation.

However, after controlling for wife's employment just before the union and her education, the relationship between the ex-spouse's social class and her post-separation employment becomes insignificant. This suggests that the effect indeed runs via her (adherence to) economic independence before separation and upper class wives' stronger preferences for work that go together with their high quality, high status jobs. To working class wives, on the other hand, only extrinsic rewards may matter since they mainly qualify for poor quality jobs. Finally, for women from the intermediate social classes work may also not provide them with status as they might have had low status part-time jobs. During the union their social standing may have been based upon their husband's social class, while after the separation, they have to derive their social status from their small jobs. In this case, being a housewife (and rely on the state or their ex-spouse for income) can be more socially rewarding to them.

### *Demographic characteristics*

I examined the effects of four demographic variables on separated women's work: Women's age at separation, her marital status during the union, the union duration, and the age of the youngest child. Age at separation has a curvilinear effect on separated women's employment. The older women are when they separate, the more hours they work on average after separation. This effect levels off, however, and when women have reached the age of 37 they work increasingly less and less hours after separation (Chapter 4). Hence, the older separated women are, the more difficult it is to increase their employment, and this restriction becomes more important at older ages. Such a curvilinear effect is also found for women's entry and

exit chances after union dissolution (Chapter 3). Up to 32 years, separated women are more likely to enter the labour market, whereas from 32 years onwards this effect is negative and becomes stronger with age. Age has a negative effect on employment exit until age 37. From then onwards, exit becomes increasingly more likely. Note that the age effect is net of the effect of women's work experience during the union, implying that separation at older ages is financially more harmful for women than separation at younger ages. Age discrimination by employers may be a reason for this.

I find no support for my expectations about the effects of marital status and union duration. Overall, women who come from a marital union work on average more hours after their union has dissolved than women who come from a consensual union (Chapter 4). This seems to be attributable to the lower exit chances of previously married women compared to previously cohabiting ones (Chapter 3). Based on Becker's specialization argument, I would have expected to find the opposite, however. First, married people have a stronger commitment than cohabiting ones, thereby making specialization a less risky strategy. Second, alimony transfers occur more often among formerly married couples than among cohabiting couples since the marriage contract is supposed to provide an income protection for specializing women. Apart from the fact that alimony payments probably are insufficient for women to make ends meet, in many societies the married may be the ones with better employment positions after all. In this case, the effect of marriage on women's employment is polluted by the reciprocal effect of women's employment on marriage formation (Oppenheimer, 2003).<sup>1</sup> When it comes to the duration of the union, no significant effects are found.

As expected, the age of the youngest child restricts women's work after separation. In all four empirical chapters, I find that separated women with a child younger than six work less than those with older children or no children. In the pooled sample of 17 countries using the FFS, women with a child below six work on average six hours less than women without children and about three hours less than women with a child between the age of six and 12. Chapter 3 shows that women with a young child (younger than seven years old) are 53 percent less likely to enter the labour market than women without children and women with older children (age 7-15) 32 percent. Women with young children also have higher exit rates after separation. For them the odds of leaving the labour market compared to women without children are 3.45, whereas the odds for women with older children are 1.79. The extent to which children form a barrier for women to increase their employment due to separation varies among countries, which I will explain later on.

---

<sup>1</sup> This argument is also in line with the finding in Chapter 3 that married women are less likely to exit.

### *6.1.3 The influence of institutions*

As I mentioned earlier, the employment consequences of separation for women differ between countries. To what extent can these country differences be explained by institutions? Chapter 2 shows that after controlling for individual-level composition effects, country differences remain and that institutions can explain these differences. The impact of institutions on women's post-separation work is addressed in all empirical chapters, but in each chapter differently.

#### *Institutions measured by a typology*

In Chapter 2, I assess the institutional effect using a divorce regime typology, distinguishing between four types: The dual-earner model (e.g. Sweden), the model of extended family solidarity (e.g. Italy), the market model (e.g. the UK), and the male breadwinner model (e.g. Germany). In this typology both formal and informal institutions are incorporated. More specifically, the typology refers to income-related state support such as single parent allowances; employment-related state support such as public child care provisions; and support provided by the family. The typology is based upon the extent to which income and employment support are provided by the state (the dual-earner model or male breadwinner model), the market, or the family. In the dual-earner model both income and employment state support are ample, whereas in the male breadwinner model the focus is on high financial support for children, while employment support for women is low. I observe systematic differences between the four types. Women in the dual-earner model have the highest odds of entering the labour market after separation, the lowest odds of employment exit, and the highest number of working hours among those who were already working before the separation. Separated women living in a market model country experienced the worst labour market outcomes: the lowest odds of entry, the highest odds of exit, and the lowest number of working hours for those who were working at the time of separation. Women experiencing a union dissolution in any of the other two models ranked in between these extremes with respect to entry chances, and did not differ from the dual-earner model with respect to the other two labour market outcomes.<sup>2</sup>

---

<sup>2</sup> The difference in entry odds between the 'dual-earner' model and the 'family' model can partly be explained by the higher unemployment rate in 'family' model countries, which is a proxy for the availability of jobs. The significant larger number of post-separation working hours in 'dual-earner' countries compared to countries with a 'market' model are highly due to the lower availability of part-time jobs. The explanation of this may be twofold. Either, women in 'market' model countries (the UK) have more difficulties in combining work and care than women in 'dual-earner' countries and the possibility to adjust (reduce) their working hours provides a solution to this combination problem. Or, women in 'market' model countries mainly qualify for part-time jobs (which are often of poor quality) and even if they would like to work more, they can't.

Based on these findings, the chapter concludes that institutions thus matter, and it adds that employment-related state support is the major driving force behind this. It seems to be mainly female-friendly state support for women's employment that explains cross-national differences in the impact of divorce for women's employment. Additionally, the extent to which the family is a safety net for women is an important factor. Thanks to this safety net, separated women in countries with little income- and employment support from the state (such as Italy and Spain) did not experience the worst employment outcomes.

*Institutions measured by separate continuous indicators*

In Chapter 3 the 'separate continuous indicators' approach is used and here I also concluded that state institutions matter. Because separate indicators are utilized to assess institutional effects on separated women's work, opposing effects could be disentangled. Indeed, employment-related state institutions (to be specific public child care provisions) encourage women's employment after union dissolution, whereas income-related state institutions (single parent allowances) discourage women's employment. An increase of one public child care place is associated with an increase of 1.6 percent in the odds of entry. An increase of 100 PPP in allowances is associated with a decrease in the entry odds of 9 percent. More generous income state support does not affect employment changes of women who were working at the time of separation, but they do seem to be a disincentive for women to enter the labour market. It is not only that women experience less economic need to work in countries with higher single parent allowances, many women (especially those with little labour market potential) may simply be financially better off on welfare than working due to the 'welfare trap' – i.e. the loss of welfare-specific benefits when employed. An additional finding is that employment-related state support is somewhat stronger related to separated women's employment than income-related state support as the effect sizes for both indicators showed. The effect size of child care facilities is 0.25 per standard deviation and the effect size of single parent allowance is 0.23. This is in line with the conclusion of Chapter 2. Finally, I tested to what extent cultural norms affect separated women's changes in employment. Although the effect was in the expected direction, it was not significant, nor was its effect size (0.07) – which may be considered of more importance when judging the importance of an effect because of the degrees of freedom problem on the macro level.

*Institutions measured by a package*

Chapter 4 tackles the measurement of institutions by using a package of continuous institutional indicators that supports gender equality on the labour market, and thereby women's economic independence. More women-supportive policies (like public child care provisions and parental leave), more opportunities to work (via flexible working schemes such as part-time work), and more normative support for working mothers (proxied by a country's employment rate) are all indications of an institutional context that is supportive for women's economic independence by facilitating her employment. The package thus captures both formal and informal institutional support for women's employment. I refer to this package as the Gender Equality Index.

This chapter relates the package of institutional support for women's employment to the size of the separation effect. Unexpectedly, separation has a stronger effect on women's employment after separation, the more traditional a society is. The effect varies from -1.25 in Estonia to 7.56 in Switzerland. I would have expected to find the opposite because separated women have more employment opportunities in more gender egalitarian societies. Additional analyses showed that on the short-term the separation effects in traditional societies are small and that as time passes by the separation effects become stronger. It is important to realize that the calculated separation effects are the results of fixed effects models. Such models only account for time-invariant differences, but differences in growth and development curves cannot be controlled for. Therefore, a ceiling effect may occur. In more traditional societies, many women can still increase their employment, whereas in societies with more egalitarian gender role values, few women can do this because they are already working full-time. Additional analyses (not presented) show that the larger increase in employment in traditional countries does not occur immediately, but only just in the long-run. An explanation for this can be that it takes time to increase employment. Women may have to increase their human capital and search for a (suitable) job.<sup>3</sup>

---

<sup>3</sup> Of course, the labour market situation may change over time, providing women with better labour market opportunities as time goes by. The results remain similar, however, after controlling the fixed effects models for period effects (instead of age effects). Hence, the structural explanation is less plausible here than the individual growth explanation.

*Institutions measured on the individual-level*

The last empirical chapter also gives an indication of how institutions are related to women's post-separation employment, but now the effect of institutional support is measured on the individual-level within one country: the UK. I examined the effects of income support from the state (welfare benefits) and the ex-spouse (alimony). Effects of employment support from the state are indirectly taken into account by a period effect (whether the separation took place before or after 1998).

The findings are in line with the conclusions of Chapter 2 and 3. Women who receive Income Support from the state are less likely to work after separation (women on welfare are 97 percent less likely to be employed after separation). Alimony support can be both informal (the payment by the ex-partner obviously) and formal (state provision in the form of guaranteed child maintenance). The analyses do not show a significant relationship between alimony and women's post-separation employment, however. This is probably not due to the awarded amounts of alimony in the UK<sup>4</sup> as these amounts are relatively high compared to those in other countries (Skinner, Bradshaw & Davidson, 2007). The problem is more likely to be found in the high non-compliance rates of fathers (Bradshaw, 2006) and the fact that the UK does not have a guaranteed maintenance scheme – child maintenance enforcement is only done for women receiving social assistance (Skinner et al., 2007).

Both institutional arrangements – alimony and welfare – alleviate women's income fall after separation, but since they are not significantly positive related to women's post-separation employment, they do not create more economic independence for women. In the case of alimony, women's economic dependence upon their spouse still continues after the union has been dissolved, whereas in the case of state support, women's dependence within the marriage has been replaced by dependence upon the state.

I also find some evidence for an effect of employment-related institutional support. After 1998, when the New Deal for Lone Parents (NDLP) was introduced in combination with the launch of the Working Families Tax Credit (WFTC) one year later, British separated women were less likely to enter and remain on welfare and slightly more likely to work (although this effect is insignificant when controlling for women's alternative income sources).

---

<sup>4</sup> For instance, for divorcing parents of two children, of which the father works full-time and earns one and a half median male full-time earnings and the mother works part-time earning median female part-time earnings, the estimated amount of child maintenance in the UK is £400 per month. In case the parents had one child and the father was receiving welfare benefits, the average amount is £20 per month. With these amounts, the UK takes an intermediate stand in the ranking of countries according to the level of child maintenance liabilities.

*Cross-level interactions*

Chapters 2, 3, and 4 also deal with cross-level interaction effects on women's post-separation employment. I start off with a discussion of the finding in chapter 4. To what extent is the effect of women's employment history during the union on their employment after separation weaker in countries with more institutional support for women's economic independence? I expected to find that the institutional context moderates the effect of women's employment history on their post-separation employment because in countries with more ample institutional support for women's employment, separated women (also those who had little work experience while they were still together with a partner) can more easily find employment and increase their working hours after they separated. The economic exit costs of marriage are reduced for women who were less economically independent during the union. Indeed, again I find that institutions matter and my expectation about the cross-level interaction turns out to be confirmed. Institutions alleviate the economic exit costs for separated women who were not working much during the union and increase their employment after separation. The effect of women's work history on women's post-separation employment varies from -1.75 (insignificant) in Italy to 11.31 in Spain. Becker's 'specialization and trading model' is thus conditional upon the context.

Furthermore, a cross-level interaction was examined in chapter 3, testing to what extent children are a barrier for women's post-separation employment in different institutional contexts. The reasoning is somewhat similar to the argumentation in the previous section: Women living in societies with more ample institutional encouragement for mothers to work (more) would experience less hindrance of young children than women living in societies with little institutional support because all separated women (also those with young children) can more easily find employment or increase their working hours. Again, I find a confirmation of this hypothesis. Using the number of public child care provisions as indicator for institutional support for women's employment in Chapter 3, women with a young child (younger than six years old) are more likely to enter the labour market the more ample public child care facilities are. In countries with few state provisions (such as the UK), women with young children are about 60 percent less likely to start working than childless women, whereas in countries with the most generous child care provision (i.e. Denmark), the difference is only 11 percent. Additionally, I found that in countries where more public child care places are available, the positive effect of children on the odds of decreasing working hours or exiting employment is lower. Women living in countries with hardly any public child care are 1.3 times more likely to decrease their working hours and 5 times more likely to exit

than childless women. In contrast, for women living in countries with ample child care arrangements the child effect disappears. The restriction of having young children is thus almost taken away in countries with generous public child care provisions.

The same conclusion can be drawn from Chapter 2, which showed that the ‘child penalty’ for separated women’s employment is largest in countries with a market regime model, smaller in male breadwinner countries, and absent in dual-earner regime countries and countries with an extended family solidarity regime. In market regime countries (like the UK), women with a child under six are 74 percent less likely to enter the labour market than in dual-earner regime countries (like Denmark). In male breadwinner countries (such as Germany), the difference in ‘child penalty’ compared to dual-earner countries is 58 percent. These results imply that in contexts where women’s employment is encouraged more by institutions, demographic variables are less relevant in explaining women’s post-separation employment than in contexts in which institutional support for women’s employment is lower. Hence, also when testing the explanatory power of demographic characteristics, the context should be taken into account.

#### *6.1.4 This study’s new findings in a nutshell*

To recap, this study contributes to the literature in four ways. Firstly, I show that women on average only modestly increase their employment after a separation and that there is much cross-national variation. Secondly, I test Gary Becker’s specialization and trading model in a more systematic and profound way than previous research has done before. I do this by analysing the reciprocal relationships between women’s employment and separation for a large number of countries. I find that the extent of women’s economic independence during the union affects their risk of separation and their post-separation employment chances and working hours in many countries, but that the relationships are weaker the more gender egalitarian countries are. Hence, in addition to previous research that has demonstrated that Becker’s theory is conditional upon time (e.g. Sweeney, 2002; South, 2001), I show it is also conditional upon place. Moreover, I add upon these studies by relating this conditionality to the degree of gender egalitarianism of the societal context. Thirdly, I show that a core sociological variable like social class – of the ex-partner – can predict women’s employment consequences of separation. What are the mechanisms that could explain this relationship has to be investigated further though. Finally, country differences in women’s post-separation employment are explained by differences in formal and informal institutions between



countries. This takes previous research on policy effects on married women's employment one step further by showing that also the employment decisions of separated women are affected by policies and the normative context. Moreover, I find that policy effects are not unambiguous, but rather contradictory – either encouraging or discouraging women's post-separation employment.

## **6.2 Theoretical implications**

### *6.2.1 Implications for economic micro-theories*

In this dissertation, the validity of micro-level explanations is tested in different institutional contexts. To what extent does the economic approach satisfy in explaining the economic impact of separation? Becker's New Home Economics theory implies that marriages in which men and women divide paid and unpaid work traditionally are more stable than marriages with a more egalitarian task division. The reasons for this expectation are that traditional role specialization would be beneficial for the marriage and that non-working women would experience higher economic exit costs out of marriage. Based on Becker's 'specialization and trading model', I developed the *underlying economic independence hypothesis*, and expected that women's employment position outside of marriage is influenced by their employment position within marriage via their human capital investments. I find that this effect is conditional upon the context. It is significantly weaker in societal contexts that are less traditional and where institutional support for women's employment is ample. Additionally, I find that the effect of women's work on the risk of separation is stronger in traditional societies with little institutional support for working women. Put differently, the economic independence hypothesis applies more to traditional societies than to societies in which more egalitarian gender role values are adhered to. Hence, although Becker's theory about marriage and divorce has explanatory power in traditional societies, his assumptions on traditional task specialization are less valid in societies where institutional support reduces women's economic exit costs. In such more egalitarian settings, the focus should shift to other theories, such as theories on sociological or psychological mechanisms to explain the causes and consequences of union dissolution.

More specifically, in contexts in which women's economic independence is more common, the economic gains of marriage and the economic costs to exit a marriage may matter less and sociological explanatory mechanisms such as women's gender role values may become more and more important. Women that have more egalitarian gender role values may be more likely to separate and more likely to work during the union as well as after the separation. Hence, in less traditional societies, women's gender role values may be a more important mechanism explaining the relationship between women's employment during the union and afterwards instead of (or on top of) women's economic exit costs.

Additionally, it would be interesting to generalize Becker's economic ideas to other aspects of independence, such as emotional ones. In this respect, one could think of the examination of psychological measures such as feelings of autonomy and interdependency between spouses. Are the emotional gains of marriage becoming more and more important the more economic gender equality there is in a society? Do more emotionally independent women have a higher risk of separation and do they feel more autonomous after the separation as well? And to what extent do feelings of autonomy spread to other fields such as the way in which women want to earn a living (do they mind to rely on the state or their ex-spouse for an income or do they prefer to be employed)?

Whether economic, sociological, or psychological theories are used to explain the economic consequences of separation for women, scholars should always be aware of the conditionality of theories they use and assess to what extent the assumptions of particular theories match reality.

### *6.2.2 Implications for sociological micro-theories*

Why do some separated women decide to work and others not? In the introduction, I suggested two main explanations: After a separation women experience economic need to work and women's human capital investments during the union determine their employment after separation. However, a third, more sociological, alternative explanation may be interesting to investigate. Work may provide women with social prestige. Reacting upon the work of Parsons (1949), Oppenheimer (1982) for instance argued that families strive to maintain their status in society and that women with a lower occupational status than their husbands withdraw from the labour market because being a housewife would provide them with more status than remaining employed in a poor quality job. Women with a higher occupational status than their husbands, on the other hand, would be more likely to separate in

order to maintain their social standing in society. Such women would have more social prestige when being alone (or with a new partner with a higher occupational status) than when being with a husband who has a lower occupational status than they themselves have.

To what extent do differences in occupational status between spouses affect the risk of separation? And what are the consequences of separation and of making a career during the union for women's post-separation occupational status? Answering these questions replaces Becker's approach of relative economic dependence in terms of employment by 'status dependence' within couples. Issues of selection and social identity may be important to consider here. With regard to selection, it may be particularly women with a higher occupational status than their husbands that are more likely to separate and who will continue working and making a career after the separation. As for the identity issue, one might expect that for women with better labour market perspectives, work is more important for their social identity. They may strive more for status by their job than women with poor quality jobs. For this latter group of women, being a housewife may provide them with more status. Moreover, the social prestige women attach to work may be different for (single) separated women compared to partnered women. Having a small, poor quality job may have been less important for partnered women's social position as their social standing may also have depended upon the socio-economic position of their spouses. After a separation, women's social prestige depends only upon their own socio-economic position. To what extent do separated women care for social prestige after separation and to what extent is this related to their post-separation employment perspectives? Does the derivation of prestige from work versus being a housewife continue after the separation or does work and the social prestige they derive from it become more important for them after the separation?

Again, the above formulated expectations may be more valid in specific societal contexts than in others. The extent to which separated women's occupational status is important for their decision to work during the union and after the separation may differ between normative contexts. In more traditional contexts, the social standing of being a housewife will be higher compared to having a low paid, low status job, whereas in more egalitarian contexts all types of work (from high to low occupational status) can be considered to be status-giving. The context reflecting the norms to which women adhere to can be the country women are living in, but also lower-level contexts – or reference groups – such as the region, social class, or educational group women belong to.

### 6.2.3 Implications for demographic micro-theories

Demographic variables have also found to be relevant as determinants of women's post-separation employment. Women's age and the age of the youngest child may hinder women's employment after separation. A drawback of investigating to what extent demographic variables explain the economic consequences of women's separation is that there is no *demographic* theory explaining the relationships between demographic characteristics and women's economic consequences of separation. The theories that are used are either economic or sociological in nature. What may be the underlying theoretical mechanisms explaining the effects of these demographic variables?

From an economic perspective, older women may experience more restrictions on the labour market because of more human capital depreciation over life and age discrimination by employers, whereas sociologically the age effect can be explained by value differences between cohorts.

The effect of the age of the youngest child is explained economically and is twofold. First, the age of the youngest child indicates women's economic independence during the union because children are the result of investment processes during the union in human capital versus marital-specific capital. Hence, the effect is a second confirmation of the *underlying economic independence hypothesis*, next to women's work history during the union. Additionally, having younger children constrains separated women's employment behaviour more than having older children. While the previous 'independence' argument also applies to married and cohabiting women's employment, the constraint explanation is more relevant for separated women because they will experience more difficulties in combining work and care because they cannot share child rearing with their partner to the extent partnered women can.

It would be interesting to investigate to what extent the above mentioned theoretical economic and sociological explanations apply. The effects of demographic variables as such may be less interesting in itself.

#### 6.2.4 Implications for institutional macro-theories

The use of different strategies to measure the impact of institutions on women's post-separation employment did not lead to different conclusions – apart from the long-term separation effects in Chapter 4. Chapters 2 and 3 demonstrate that it is important to consider possible contradictory effects of institutions. While *employment*-related institutional support is found to encourage women's employment, *income*-related support discourages it.<sup>5</sup> Hence, it is very important to assess beforehand what the direction of institutional effects on a certain dependent variable may be so that different institutional arrangements can be included in the analyses. An important question that remains unanswered, however, is related to long-term effects of institutions. Although welfare benefits may reduce the short-term need for labour income, it provides women with more time to increase their human capital and search for jobs that are more in line with their skills and their needs to combine work and care. To what extent do employment- and income-related institutions encourage women's economic independence in the long-run?

The second important implication that can be derived from my findings is that the actual effects of institutional arrangements may differ from the intentions that governments had when introducing certain arrangements. For instance, policies on public childcare provisions may be implemented with the intention to increase children's well-being, but they may also have a positive side-effect on mother's labour market attachment. Ample public child care provisions encourage the employment of women with (young) children. A second example of unintended institutional effects is the spread to other target groups. For example, policymakers may have been aiming to alleviate the income of single mothers and single parent allowances may be beneficial for separated women. Thirdly, the spill over of more general arrangements towards target groups is an example. Policies aiming at encouraging all women's employment may encourage the particular group of separated women as well.

A third implication concerns the importance governments attach to alleviate financial hardship of separated women and encourage their employment. In countries in which divorce is more common, institutional arrangements that mitigate income drops due to divorce and enhance women's economic independence are more urgent. It would be interesting to investigate to what extent divorce rates and institutions such as guaranteed alimony schemes and single parent allowances are related and to what extent there is a reciprocal relationship.

---

<sup>5</sup> This conclusion can be directly drawn from Chapters 2 and 3, but the findings from Chapters 4 and 5 also hint into this direction. Chapter 4 zoomed in on employment-related support and found that separated women's employment is facilitated when support is more ample. Chapter 5 focused on income-related support and concluded that women's post-separation employment and income support are negatively related.

In this dissertation, I observed that in countries with ample institutional arrangements, women are more likely to separate because the economic exit costs are lower compared to countries with fewer institutional arrangements.

This last issue concerns cross-national differences in selection bias and it could indicate that findings on the economic consequences of separation are obscured by the causes of separation. This could have been particularly applicable to countries with traditional value systems as in such countries divorce is found to be highly selective – i.e. only women who can afford it, divorce. Descriptive figures in Chapter 4 illustrated this problem. Although the results from the multivariate analyses in that chapter seem to suggest that selection bias is sufficiently controlled for when pre-separation characteristics are taken into account, country differences in the institutionalization of divorce remains a problem researchers should be aware of when studying the economic consequences of divorce.

Finally, values, traditions, and customs about women's work, equality within the household, and reliance on the family network as a safety net are important to consider when examining institutional effects on separated women's employment. This study shows that in Southern European countries, women are more likely to rely on their family after separation, although it is unknown to what extent this support covers financial transfers, housing, or informal child care. Egalitarian gender role values do not seem to affect separated women's employment on the short-term (as the findings of Chapter 3 show). Although in Chapter 4, I measured both cultural and structural aspects of the context, the findings indicate that in contexts in which women's paid work is more encouraged, the economic consequences of separation for women are less severe due to women's greater economic independence during the union. The findings of Chapter 3 and 4 do not have to imply a contradiction. Indicators which measure behaviour and which do not only refer to values – but also to customs and traditions within the family – may be better measures of the cultural environment than the aggregated measure of women's preferences that is used in Chapter 3. Moreover, in Chapter 4 I examined the impact of the institutional context on women's post-separation employment in the long-run which could differ from short-term effects. The long-term impact of values, customs, and traditions related to the family should therefore not be overlooked.

## 6.3 Limitations and suggestions for future research

### *6.3.1 Limitations and suggestions concerning micro-theories*

The most important limitations of this dissertation and the improvements that can be made upon it are threefold. Future research can improve upon the design used in this study, add theoretical explanations by using different independent variables, and generalize hypotheses by expanding the results to other dependent variables.

#### *Design*

As for the design, a larger number of separations, longer periods, and more countries are needed. Most studies on the consequences of separation are based on a low number of separated respondents which is a statistical inference problem. This study has improved upon previous research by using a larger number of cases (separations). This was done on the one hand via pooling several waves of panel data and on the other hand by pooling countries. Still, cross-national comparable data sets with an oversampling of divorcees would enable researchers to study the consequences of divorce and separation more thoroughly.

Secondly, few studies have been able to examine the long-term economic consequences of separation so far. Using the long-term data of the retrospective surveys of the FFS, this thesis improved upon previous research. However, the measurement of women's economic independence during the union could be improved by looking at both spouses' income. In order to achieve this, cross-national comparable long-running panels with couple data are needed. Retrospective surveys are less obvious in this case since they suffer from difficulties in questioning income information retrospectively.

#### *Adding independent variables*

Future research can also focus on other theoretical explanations of the economic consequences of separation for women. Although my findings are in line with my expectations based on the underlying mechanism explaining the relationship between women's employment and separation, a confirmation of the *underlying economic independence hypothesis* does not imply the validity of Becker's theory, as Popper would say. Other theories may form an alternative explanation for task specialization within the

household and its consequences. Instead of (economic) utility considerations of the spouses, the mechanism at work may be sociological, which urges the need to study sociological explanations of the economic consequences of separation for women. What matters may be spouses' relative bargaining power (Blood & Wolfe, 1960), functionality for society (Parsons, 1949), the couple's aim to maintain their socio-economic status in society (Oppenheimer, 1977), or spouses' gender role values (Hakim, 2000; Stafford, Backman & Dibona, 1977). Future research should empirically test these arguments by examining other independent variables. Spouse's comparative advantages and relative resources may be better measured using couple data in which the income, education, work experience, and employment status of both spouses are present. Furthermore, Oppenheimer's status attainment argument may be tested by studying the effect of status differences between spouses on the risk of separation and its consequences. Finally, the degree of egalitarianism (both in values and in behaviour) of both spouses on the likelihood to divorce and the impact of divorce can be examined to test gender role theories.

#### *Expansion to other dependent variables*

A last point of improvement can be made by investigating other dependent variables. I already mentioned wife's occupational status after separation as a new important dependent variable to look at in order to study the economic consequences of separation for women.

Other dependent variables that I want to discuss here are various income sources and poverty and deprivation measures.

Repartnering, alimony, financial support from the family, and pensions are important alternative income sources. Scholars have shown that repartnering substantially reduces the income drop women experience due to separation. To what extent do repartnering rates differ between countries? And to what extent is the buffering effect of a new partner similar in all countries? How are repartnering and employment after separation related to each other? On the one hand, having a new partner may provide women with sufficient income and thus reduces the economic need to work. On the other hand, not having a job may speed up the decision to start living together with a new partner. Since decisions about the use of alternative income sources are taken simultaneously and the causal direction of the effects is difficult to derive, receipt of alternative income sources has to be examined using



simultaneous equation modelling. Only in this way the causality of the effects of different income sources can be uncovered.<sup>6</sup>

To what extent does alimony reduce the income drop for women in different countries and to what extent is it an income source that needs to be supplemented with additional income sources such as market income? Questions about the exact amounts of alimony receipts and payments should be included in the cross-national comparative data that is gathered.

The same applies to financial transfers by the family, of which cross-national comparable information is lacking up till now. In countries with low state support for divorcees, the family may step in and help separated women. This help can be in the form of money or child care. Further research can disentangle to what extent financial transfers decrease separated women's economic need to work, whereas at the same time the family may facilitate separated women's work by providing informal care. Especially in Southern and Eastern European countries the family is an important institution that may alleviate the economic consequences of separation.

Finally, as divorce is occurring more and more among older cohorts of women, another income source may be relevant to investigate: pensions. To what extent do women in different countries receive pensions? To what extent do their own pensions suffice and to what extent can they rely on pensions of their ex-husbands?

With respect to poverty and deprivation, changes in poverty status, consumption patterns and life style around the separation could be examined. Although poverty and deprivation after union dissolution have already been studied in a cross-national way (see Aassve et al., 2007), there still remain some questions. Do the poor stay poor after separation in different countries? To what extent do poor women improve their financial situation by separation? Additionally, for women with an ex-husband who had a relatively high income, questions of life style preferences are important. To what extent do separated women strive to keep the standard of living and life style they had when they were married? What (which income source) does it take to do that? Apart from the possibilities (e.g., eligibility) women have in receiving income from different sources, the attractiveness of certain income sources may also matter. Certain income sources may provide more social status than others and they may therefore be more attractive to receive. Again, women's reference group and status are

---

<sup>6</sup> The same applies for instance to the reciprocal relationship between work and welfare. Women who cannot find a job are eligible for and may want to receive welfare benefits and, vice versa, women on welfare are less likely to leave welfare because they cannot find a job and may be trapped in welfare. Hence, the use of a certain income source depends on the availability and eligibility of other income sources.

important in this respect. For instance, for service class women, work itself may provide status, whereas for women from the intermediate social class, status may depend upon income in general. An income source like alimony may therefore be more attractive for intermediate class women as it facilitates the combination of work and care.

### *6.3.2 Limitations and suggestions concerning macro-theories*

With respect to the macro-level improvements can be made according to the study design and the measurement of the independent variables.

#### *Design*

The first issue that needs to be taken into account is a problem all cross-national research has to cope with: The low number of cases on the macro-level (the degrees of freedom problem). Although this study already made a major improvement by examining separated women's employment in 23 countries, it is still difficult to disentangle one macro-level effect from the other which makes it necessary to increase the number of countries that are studied. This is particularly true for the effects of formal versus informal support as can be seen in Table 6.1. The table shows the associations between several indicators of institutions affecting separated women's employment that are taken into account in this dissertation (see appendix for the score of countries on these indicators). Countries with generous formal institutional support, such as high amounts of single parent and child allowances, an advanced maintenance scheme, and ample provisions of public child care on average have little informal institutional support; family and friends provide less often financial support and co-residence with other adult family members occurs less frequently. Countries with ample public child care provisions also have a high employment rate, suggesting that in such countries the normative environment is less disapproving of working women, and mothers in particular. Including more countries in the analyses reduces the degrees of freedom problem on the macro-level and may also diminish the selectivity of the sample of countries which goes together with more variation on the country level. More countries thus enable the researcher to more easily disentangle different macro-level effects and generate more robust results. For instance, adding non-Western industrialized countries (e.g., Latin America, Asia) when testing Becker's economic specialization and trading model would increase our knowledge about the validity of his theory as in these countries more traditional gender role patterns can be

observed than in Western industrialized countries. This would enlarge the variation in gender egalitarianism among countries even more and would therefore provide a better test of Becker's argument.

Table 6.1

Correlations between separate continuous indicators of institutional support for separated women's employment

	1	2	3	4	5	6	7	8	9	10	N
Child allowances (1)											65
Single parent allowances (2)	0.52**										70
Child maintenance (3)	0.50**	0.45**									64
Advanced child maintenance (4)	0.64**	0.16	0.34**								76
Public child care provisions (5)	0.20	0.50**	0.28*	0.23							76
Parental leave (6)	0.26	-0.18	0.36**	0.65**	-0.01						74
Share of part-time work (7)	0.51**	0.60**	0.27*	0.03	0.16	-0.38**					76
Informal income support (8)	-0.54**	-0.62**	-0.17	-0.42**	-0.15	0.14	-0.58**				80
Living with parents (9)	-0.47**	-0.57**	-0.69**	-0.40**	-0.52**	-0.20	-0.48**	0.19			92
Informal child care (10)	-0.10	0.09	-0.27	-0.45**	-0.68**	-0.45**	0.31*	0.25	0.29*		52
Female employment rate (11)	0.19	0.36	0.44**	0.25*	0.60**	0.33**	0.07	0.25*	-0.37**	-0.62**	92

Source: *Institutional Support for Single Mothers (ISSM) database (23 industrialized countries; 1990, 1995, 2000, 2005).*

\*  $P < 0.05$ ; \*\*  $P < 0.01$ , two-tailed tested

### *Measurement of macro-level independent variables*

What about the measurement of institutional effects on women's post-separation employment?

Which approach is best to use? Although I did not test the different conceptualizations of institutions simultaneously in one model (I leave this to future research since more degrees of freedom on the macro-level are needed for this), I can make some suggestions of which method of measurement is recommendable. Obviously, it first of all depends upon the research question what exactly one wants to measure. Is the aim to give concrete advice to policymakers or is the institutional context just regarded as a control variable? But apart from that, I recommend to use packages because they best reflect the fact that institutions complement, overlap, or oppose each other. The institutional context is too complex to be captured by a categorical variable 'regime typology' or a limited set of macro-indicators focusing on only one dimension. It involves multiple, interrelated institutional factors with different underlying dimensions depending on which field (unemployment, women's economic independence) one is examining. A typology is a 'black box', masking the effect of different dimensions and making it difficult to judge which type of institutional support (formal or informal, employment-related or income-related) has an effect. Moreover, as Chapter 2 has shown, a typology masks within-regime variation. Separate continuous

indicators, on the contrary, are domain-specific, making it possible to disentangle opposing institutional effects. However, they overlook the overlap and additive effects of different policies and other types of institutional support. Each country differs in the level of single parent allowances, child maintenance and child allowances, but also in the availability of public child care, parental leave, housing and health subsidies, etcetera. These institutional arrangements bundled (be it in a complementary, overlapping or contradictory way) affect separated women's employment situations. What matters most for separated women's situation is the sum of all policies and not that of a particular one.

Of course, the difficulty of controlling for spurious effects (of cultural norms or a country's economy) still remains, also when one uses packages. However, it is less severe because fewer measures on institutions are needed to capture the institutional context, which leaves more degrees of freedom for the inclusion of alternative explanations. Moreover, by including two institutional packages one can also distinguish between additive and opposing effects of specific policies. Finally, despite the fact that it is not possible to give recommendations about specific concrete policies, the use of packages may lead to implications for the broader domain of policies. Future research may create domain-specific packages to measure institutional support focusing on support for separated women in particular. The database that is provided in the appendix may be a good starting point to derive such domain-specific indicators.

## 6.4 Policy implications

Although over the years the employment opportunities for women have increased, women still encounter financial difficulties after a separation. Divorced or separated mothers with small children are a large share of the poor population and in most countries particularly this group of women have little perspective to improve their financial situation since they have few labour market opportunities. As divorce is becoming more and more common nowadays, governments should anticipate upon the negative consequences of it. Previous research has already demonstrated that the income fall due to union dissolution can be alleviated by providing income support such as single parent allowances. Is divorce a life course risk, just like unemployment and sickness (the 'old' social risks) that needs to be insured for by

governments? Could the introduction of a 'divorce allowance' cushion people's sudden income losses due to union dissolution? And how can policies support women's economic situation in the long-term? Three main problems need to be taken into account by policymakers who may consider a change in current policies. These problems concern the effectiveness of alimony schemes, the welfare trap, and women's economic independence in the long-term.

First of all, many countries already have some kind of divorce allowance in the form of alimony (or child maintenance). However, alimony as a single income source on average is insufficient for women and should most of the time be complemented with market income. Moreover, in most countries not everyone receives alimony payments and it seems that the women who might be needing it the most often do not receive it or only receive a small amount. That alimony does not alleviate women's income drop after separation to a large extent and does not reach the poor may be due to non-compliance of fathers in paying alimony – which has been shown to be due not only to unwillingness but also to financial inability. In order to provide separated women with a stable, reliable income, it therefore seems best to have a system in the form of a guaranteed maintenance scheme. Such schemes are already used in 'dual-earner' countries such as Sweden and Denmark, but the alimony liabilities in these countries are low compared to countries with other 'child maintenance regimes' (Skinner et al., 2007). Therefore, many women have to combine alimony with employment (in which they succeed comparatively well as employment opportunities for women are ample). While in 'dual earner' countries compliance rates are very high and guaranteed maintenance schemes provide separated women with a stable, reliable income, in other countries (those with a 'market' or 'male breadwinner' regime), the problem of non-compliance is greater (Skinner et al., 2007) and not guaranteeing alimony for women makes alimony an unstable income source. In Southern European countries (with an 'extended family solidarity regime') alimony schemes – let alone guaranteed alimony – are even absent, and in combination with the relatively low economic independence of women in these countries introducing some kind of a divorce allowance or alimony seems here the most urgent.

The second problem policymakers should take into account when they want to improve separated women's economic situation is the welfare trap. This phenomenon is present mainly in countries with means-tested welfare related benefits (like housing and health care benefits), such as the Netherlands or the UK. Because women who want to leave welfare by work lose welfare-specific benefits, work often is financially less attractive than

welfare and especially for women with little human capital it may be difficult to make ends meet as they qualify only for poor, low paid jobs. Hence, irrespectively of women's desire to work, women with low labour market perspectives may be trapped in welfare. In addition, lack of good affordable child care may increase this welfare trap as especially for single mothers it is difficult to combine work and care. Arrangements that can diminish the trap are increases in work tax reductions and continuing housing and health care subsidies while working (which reduce the income gap between Income Support from the state and labour income) on the one hand and on the other hand providing good quality part-time jobs and offering affordable (or free) good quality child care (which facilitate the combination of work and care).

Third, alleviating women's financial situation only on the short-term may make women dependent upon others (the state, the ex-spouse) in the long term. Being economically independent may provide women with independence in other fields as well (emotionally and socially) and makes them less economically vulnerable in the future. This is for instance not the case when they repartner while not earning their own income. The greater instability of secondary marriages and the depreciation of their human capital in the meantime is a double risk for women who repartner without working. Given the trend towards institutionalization of divorce in many Western societies, women's economic independence over their life course should therefore be encouraged. This thesis has demonstrated that just providing income support is insufficient to achieve this as it discourages women's employment, at least in the short-term. The test of opposing effects of income- versus employment-related state institutions on separated women's employment indicates that welfare states should *simultaneously* facilitate the employment of separated women. Hence, next to a basic level of income, the state should offer a full package of state arrangements that encourage both separated and married women's employment. One could think for instance of facilitating the combination of work and care by offering affordable, good quality public child care provisions; grant ample parental leave arrangements; and provide flexible working hours. Negative effects of discrimination by employers should also be dealt with. To what extent do employers provide equal opportunities to older women and women with young children in all countries? Here also flexible working schemes which take account of the difficulties women encounter in combining work and care could be a solution. Moreover, all separated women should be given the opportunity to invest in their human capital in order to improve their labour market opportunities. This could be done by offering assertiveness and self-confidence courses and providing financial support for educational (re-)training. Finally, married and

cohabiting women should be encouraged to remain working and keep on investing in their human capital even though they can rely on their spouses' income. To achieve this, women could be informed about the double risk they run when they withdraw from the labour market, reduce their working hours, or delay their career progress. The dissemination of this information could be done for instance by schools or the government. Although all countries still have a gender gap in economic independence, this dissertation shows that the provision of facilities and information which encourage women's economic independence is the most urgent in societies in which the family system is more traditional such as countries with an extended family solidarity model (e.g. Italy and Spain) and male breadwinner countries (like Germany or the Netherlands).

## Samenvatting (Summary in Dutch)

In dit proefschrift onderzoek ik de gevolgen van (echt)scheiding voor het werken van vrouwen vanuit een landenvergelijkend perspectief. Welke groepen vrouwen veranderen hun arbeidsmarktstatus en het aantal uren dat ze werken na een scheiding? En waarom doen ze dat? In voorgaand onderzoek ging men ervan uit dat hieraan vooral economische redenen ten grondslag liggen. Ik toets in hoeverre een economisch perspectief een verklaring biedt voor de verschillen in de arbeidsmarktparticipatie van vrouwen, maar voeg daar bovendien een sociologisch, demografisch en beleidsperspectief aan toe. Belangrijk hierbij is dat ik een multi-niveau aanpak gebruik om verschillen tussen landen in de economische gevolgen van scheiding voor vrouwen te verklaren. Dat betekent dat ik verschillen in het werken van vrouwen na een scheiding verklaar door zowel individuele kenmerken van vrouwen als door landenkenmerken zoals de institutionele context. Met dat laatste bedoel ik sociaal geconstrueerde formele en informele regels die het gedrag leiden van individuen via rechten, plichten, condities en sancties. Voorbeelden van formele instituties zijn arrangementen door de staat zoals bijstandsregelingen voor alleenstaande moeders en kinderopvangfaciliteiten. Informele instituties zijn gewoonten, normen en tradities, bijvoorbeeld over de acceptatie van het werken van vrouwen, de rolverdeling tussen mannen en vrouwen in het gezin en het familienetwerk als vangnet.

Om mijn onderzoeksvragen te beantwoorden heb ik gebruik gemaakt van verschillende microniveau datasets en deze gekoppeld aan diverse macroniveau institutionele indicatoren. Het grote aantal landen dat ik bestudeer, is een belangrijke meerwaarde van dit proefschrift, omdat de variatie in instituties en het aantal vrijheidsgraden op macroniveau groter is naarmate het aantal landen groter is. Niettemin is het nog altijd moeilijk om het effect van instituties te meten en daarom heb ik vier verschillende manieren gebruikt om de invloed van instituties op het werken van vrouwen na scheiding te bepalen, waarbij in elk hoofdstuk een andere benadering is toegepast.

Samengevat zijn de belangrijkste bevindingen van dit onderzoek de volgende. Ten eerste blijkt dat de stijging in de arbeidsmarktaandeelname van Europese vrouwen na een scheiding gemiddeld genomen slechts bescheiden is, maar ook dat er grote verschillen zijn tussen landen (*Hoofdstuk 2 en 3*). Waar in landen als Nederland, Denemarken en Italië de



arbeidsmarktparticipatie van vrouwen in het jaar na de scheiding stijgt met 18 tot 22 procent, blijft de participatie in Ierland, Oostenrijk, Finland en Griekenland gelijk. In het Verenigd Koninkrijk neemt het aantal vrouwen met betaald werk zelfs af in het eerste jaar na scheiding (met zeven procent).

Hoe kunnen we deze verschillen tussen landen en tussen vrouwen onderling binnen landen verklaren? Op individueel niveau zoek ik allereerst naar economische verklaringen, waarbij mijn aandacht vooral uitgaat naar het toetsen van de onderliggende aannames van de *onafhankelijkheidshypothese*. Deze hypothese is afgeleid uit Gary Becker's specialisatie- en ruilmodel. Zij veronderstelt kort gezegd dat taakspecialisatie tijdens het huwelijk (i.e. mannen doen vooral betaald werk, terwijl vrouwen zich richten op het huishouden en de zorg voor kinderen) economische baten oplevert en dat deze baten verminderen naarmate vrouwen meer werken. Daarnaast is de verwachting dat hoe meer tijd vrouwen in de arbeidsmarkt investeren tijdens het huwelijk, des te minder hun menselijk kapitaal (af te meten aan opleidingsniveau en on-the-job-training) devalueert en des te kleiner de economische kosten zijn van een scheiding. Vrouwen kunnen dan bijvoorbeeld makkelijker een baan vinden en in hun eigen inkomen voorzien wat vaak een hoger inkomen oplevert dan wanneer ze moeten terugvallen op de bijstand of op hun ex-partner voor alimentatie. Een grotere mate van economische onafhankelijkheid van vrouwen zou daarom gepaard gaan met een grotere kans om te scheiden (*ceteris paribus*).<sup>1</sup> Hebben gescheiden vrouwen inderdaad minder economische kosten dan vrouwen die niet scheiden? Hebben ze bijvoorbeeld een beter arbeidsmarktperspectief? En in hoeverre leiden investeringen in menselijk kapitaal tijdens een huwelijks- of samenwoonrelatie daadwerkelijk tot betere arbeidsmarktkansen na een relatiebreuk? Deze assumpties van de *onafhankelijkheidshypothese* heb ik getoetst en ik toon aan dat in de meeste landen gescheiden vrouwen inderdaad meer op de arbeidsmarkt participeren (vaker en meer uren werken) dan gehuwde vrouwen (*Hoofdstuk 3 en 4*). Bovendien vind ik voor de helft van de onderzochte landen een verband tussen de mate waarin vrouwen economisch onafhankelijk waren tijdens het huwelijk of de samenwoonrelatie en hun arbeidsmarktkansen en het aantal uren dat ze werken na de relatiebreuk (*Hoofdstuk 3 en 4*).

Deze bevindingen benadrukken het belang van 'selectie' in het onderzoek naar de economische gevolgen van scheiding. Als juist vooral vrouwen met goede arbeidsmarktkansen scheiden, dan is een geobserveerde stijging in de arbeidsmarktparticipatie van

---

<sup>1</sup> Naast economische afwegingen spelen sociaal-psychologische redenen natuurlijk ook (wellicht nog wel meer) een rol. Met dergelijke factoren kan ik helaas geen rekening houden omdat de gegevens daarvoor ontbreken. Het is echter aannemelijk dat lagere economische kosten de drempel om te scheiden kunnen verlagen, ongeacht hoe vrouwen de kwaliteit van en de tevredenheid met hun relatie ervaren. Niettemin zullen mijn conclusies waarschijnlijk meer van toepassing zijn op vrouwen die een slechte relatie beëindigen.

vrouwen na de scheiding niet een *gevolg* van de scheiding maar een *oorzaak*. Alleen de vrouwen die het zich financieel kunnen veroorloven, scheiden in dat geval. Het opnemen van een aantal goede voorspellers van de arbeidsmarktkansen van gescheiden vrouwen (zoals hun opleidingsniveau en arbeidsmarktervaring) lijkt echter afdoende om voor dit mechanisme te controleren (*Hoofdstuk 4*).

Daarnaast heb ik laten zien dat een sociologische variabele *pur sang* zoals sociale klasse – in dit geval de klasse van de ex-partner – de gevolgen van scheiding voor het arbeidsaanbod van vrouwen kan voorspellen (*Hoofdstuk 5*). Welke mechanismen precies een rol spelen in de verklaring van de samenhang tussen *zijn* sociale klasse gedurende de relatie en *haar* arbeidsmarktdeelname na de scheiding, is echter een vraag voor vervolgonderzoek.

Kijken we naar crossnationale verschillen in de gevolgen van scheiding voor de arbeidsmarktparticipatie van vrouwen, dan toont dit onderzoek dat formele en informele instituties het arbeidsmarktgedrag van gescheiden vrouwen beïnvloeden (*Hoofdstuk 2 en 3*). Belangrijk daarbij is dat de effecten van verschillende beleidsarrangementen niet eenduidig zijn, maar elkaar kunnen tegenwerken. Zo stimuleert werk-gerelateerd beleid de arbeidsmarktdeelname van vrouwen, terwijl inkomens-gerelateerd beleid deze juist ontmoedigt, althans op de korte termijn. Ook heb ik aannemelijk gemaakt dat waarden, tradities en gewoonten over het werken van vrouwen, de taakverdeling in het huishouden en de mate waarin de familie als vangnet fungeert, belangrijk zijn ter verklaring van de arbeidsmarktparticipatie van vrouwen.

Tot slot vind ik bewijs voor de aanname dat de verklaringskracht van Becker's specialisatie- en ruiltheorie *context-afhankelijk* is (*Hoofdstuk 4*). Eerder onderzoek heeft al aangetoond dat Becker's theorie meer opgeld doet in periodes (huwelijkscohorten) waarin men meer traditioneel dacht over de rolverdeling tussen mannen en vrouwen. Deze studie toont aan dat deze conditionaliteit ook geldt voor het land waar vrouwen wonen; naarmate in een land minder traditionele normen heersen en er meer institutionele steun bestaat voor vrouwen na een scheiding, spelen de economische kosten van een scheiding minder een rol ter verklaring van het arbeidsmarktaanbod van gescheiden vrouwen.

Wat zijn de implicaties van deze bevindingen? Ten eerste wijst de context-afhankelijkheid van Becker's theorie erop dat andere theorieën in de huidige modernere samenlevingen belangrijker zijn ter verklaring van de economische gevolgen (maar ook de oorzaken) van scheiding voor vrouwen, zoals theorieën van sociologische of psychologische aard. Daarbij kan gedacht worden aan de invloed van waarden of preferenties om economisch

onafhankelijk te zijn en de mate waarin vrouwen status ontleen aan werk, maar ook aan andere aspecten van onafhankelijkheid, zoals autonomie en emotionele onafhankelijkheid.

Ten tweede impliceert de bevinding dat werkgerelateerde en inkomensgerelateerde instituties een tegenstrijdige invloed hebben op de arbeidsdeelname van gescheiden vrouwen, dat het belangrijk is om op voorhand de mogelijke richting van beleidsarrangementen in te schatten zodat mogelijk tegenstrijdige effecten van verschillende indicatoren van beleid tegelijk getoetst kunnen worden.

Om wetenschappelijke vooruitgang te boeken, zou toekomstig onderzoek zich moeten richten op het verzamelen van crossnationaal vergelijkende panel data waarbij de geschiedenis van beide partners in kaart wordt gebracht wat betreft hun inkomen, opleiding, werkervaring, arbeidsmarkt- en baanstatus, alsmede hun waarden over de taakverdeling in het huishouden en hun daadwerkelijke gedrag wat dit betreft. Vooruitgang kan bovendien ook geboekt worden op het gebied van andere afhankelijke variabelen die de economische positie van vrouwen na scheiding meten, zoals verschillende inkomensbronnen (inkomen van een nieuwe partner door hertrouw, alimentatie, financiële steun door de familie en pensioenen) en armoede- en deprivatiematen. Wat zijn bijvoorbeeld de oorzaken en gevolgen van hertrouw en in welke mate variëren deze naarmate scheiding vaker voorkomt in een samenleving?

Wat het macroniveau betreft zou Becker's *onafhankelijkheidshypothese* nog beter getoetst kunnen worden met een uitbreiding naar niet-westerse samenlevingen omdat daar traditionelere gender rol patronen geobserveerd kunnen worden dan in de meeste Westerse landen het geval is. Daarnaast kunnen instituties mijns inziens het best gemeten worden aan de hand van 'pakketten' of indices van verschillende indicatoren omdat deze manier van meten het best weerspiegelt dat instituties elkaar kunnen complementeren, overlappen of tegenwerken.

Ik sluit het proefschrift af met een drietal beleidsoverwegingen waarbij ik vragen stel bij de huidige alimentatiewetgeving in Europese landen, de armoedeval en het dubbele risico dat vrouwen lopen als ze afhankelijk zijn van het inkomen van hun partner. Ten eerste hebben veel landen nog geen of ontoereikende alimentatiewetten. Dit is met name een probleem in Zuid-Europese landen, maar ook in veel andere Europese landen ontvangen juist vrouwen die het meest een inkomen nodig hebben, weinig of geen alimentatie. Garantie van alimentatiebetalingen door de staat kan vrouwen in elk geval een stabiel en zeker inkomen bieden. Het tweede probleem waaraan beleidsmakers aandacht zouden kunnen schenken is de armoedeval, een negatief bijeffect van inkomens-/bijstandsafhankelijke regelingen zoals

huursubsidie en zorgtoeslag. Omdat vrouwen die de bijstand verlaten vanwege werk het recht op dergelijke regelingen verliezen, is werken vaak financieel onaantrekkelijk, vooral voor vrouwen die alleen voor laagbetaalde banen kwalificeren. Tot slot stel ik vragen bij de economische onafhankelijkheid op de lange termijn van vrouwen die terugvallen op het inkomen van een nieuwe partner. Mogelijk biedt het hebben van een eigen arbeidsinkomen vrouwen ook onafhankelijkheid op andere gebieden (emotioneel en sociaal) en maakt het ze economisch minder kwetsbaar in de toekomst. Niet gaan werken en met een nieuwe partner samenwonen, vormt een dubbel risico: De relatie met de nieuwe partner kan stuk lopen (hertrouwers scheiden gemiddeld vaker dan eerstgehuwden) en door niet te werken verkleinen vrouwen hun kansen op de arbeidsmarkt omdat ze niet investeren in hun menselijk kapitaal. Omdat scheiding in steeds meer samenlevingen vaker voorkomt, is het voor vrouwen des te belangrijker om economisch zelfstandig te zijn. Naast het informeren van vrouwen over het dubbele risico dat ze nemen wanneer ze terugtreden van de arbeidsmarkt of minder gaan werken, zouden overheden deze onafhankelijkheid op verschillende manieren kunnen stimuleren waarbij een inkomen door de staat (hetzij in de vorm van bijstand, een gegarandeerd alimentatie inkomen, of subsidie voor het volgen van een opleiding) altijd gepaard zou moeten gaan met werkgerelateerde arrangementen die het combineren van werken en zorgen vergemakkelijken zoals kwalitatief goede en betaalbare kinderopvang, ouderschapsverlof en flexibele werktijden.



## References

- Aassve, Arnstein, Betti, Gianni, Mazzuco, Stefano, and Mencarini, Letizia. (2007). Marital Disruption and Economic Well-Being: A Comparative Analysis. *Journal of Royal Statistical Society*, **170**(3), 781-799.
- Acker, Joan. (1973). Women and Social Stratification: A Case of Intellectual Sexism. *The American Journal of Sociology*, **78**(4), 936.
- Allison, Paul D. (1990). Change Scores as Dependent Variables in Regression Analysis. *Sociological Methodology*, **20**, 93-114.
- Amato, Paul. D. (2000). The Consequences of Divorce for Adults and Children. *Journal of Marriage and Family*, **62**(4), 1269-1287.
- Amato, Paul D., and DeBoer, Danelle D. (2001). The Transmission of Marital Instability across Generations: Relationship Skills or Commitment to Marriage? *Journal of Marriage and the Family*, **63**(4), 1038-1051.
- Amato, Paul D., and Irving, Shelley. (2006). Historical Trends in Divorce in the United States. In M. A. Fine & J. H. Harvey (Eds.), *Handbook of Divorce and Relationship Dissolution*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Andreß, Hans-Jürgen. (2003). *Die Ökonomischen Risiken Von Trennung Und Scheidung Im Ländervergleich: Ein Forschungsprogramm* (working paper No. 9). Bielefeld: University of Bielefeld: Faculty of Sociology.
- Andreß, Hans-Jürgen, Borgloh, Barbara, Bröckel, Miriam, Giesselman, Marco, and Hummelsheim, Dina. (2006). The Economic Consequences of Partnership Dissolution - a Comparative Analysis of Panel Studies from Belgium, Germany, Great Britain, Italy, and Sweden. *European Sociological Review*, **22**, 533-560.
- Andreß, Hans-Jürgen, and Hummelsheim, Dina (Eds.). (2009). *When Marriage Ends. Economic and Social Consequences of Partnership Dissolution*. Cheltenham: Edward Elgar.
- Arber, Sara, and Ginn, Jay. (1995). The Mirage of Gender Equality: Occupational Success in the Labour Market and within Marriage. *The British Journal of Sociology*, **46**(1), 21.
- Avellar, Sarah, and Smock, Pamela. (2005). The Economic Consequences of the Dissolution of Cohabiting Unions. *Journal of Marriage and Family*, **67**(2), 315-327.
- Beck, Ulrich. (1992). *Risk Society: Towards a New Modernity*. London: Sage Publications
- Becker, Gary. (1965). A Theory of the Allocation of Time. *Economic Journal*, **75**, 493-517.
- Becker, Gary. (1981). *A Treatise on the Family*. Cambridge: Harvard University Press.
- Becker, Gary, Landes, Elisabeth M., and Michael, Robert T. (1977). An Economic Analysis of Marital Instability. *The Journal of Political Economy*, **85**(6), 1141.
- Behr, Andreas, Bellgardt, Egon, and Rendtel, Ulrich. (2005). Extent and Determinants of Panel Attrition in the European Community Household Panel. *European Sociological Review*, **21**, 489-512.
- Beller, Andrea H., and Graham, John W. (1985). Variations in the Economic Well-Being of Divorced Women and Their Children: The Role of Child Support Income. In Martin H. David & Timothy Smeeding (Eds.), *Horizontal Equity, Uncertainty and Economic Well-Being*. Chicago: The University of Chicago Press.
- Belsley, David, Kuh, Edwin, and Welsch, Roy. (1980). *Regression Diagnostics: Identifying Influential Data and Sources of Collinearity*. New Jersey: John Wiley.
- Bettio, Francesca, and Plantenga, Janneke. (2004). Comparing Care Regimes in Europe. *Feminist Economics*, **10**(1), 85-113.
- Blau, Francine, Ferber, Marianne, and Winkler, Anne. (2006). *The Economics of Women, Men, and Work*. Upper Saddle River, NJ: Prentice Hall.
- Blood, Robert O., and Wolfe, Donald M. (1960). *Husbands and Wives: The Dynamics of Married Living*. Illinois: The Free Press of Glencoe.
- Blossfeld, Hans-Peter, and Hofmeister, Heather (Eds.). (2006). *Globalization, Uncertainty and Women's Careers: An International Comparison*. Cheltenham: Edward Elgar.
- Blossfeld, Hans-Peter, and Huinink, Johannes. (1991). Human Capital Investments or Norms of Role Transition? How Women's Schooling and Career Affect the Process of Family Formation. *American Journal of Sociology*, **97**(1), 143-168.

- Blossfeld, Hans-Peter, and Müller, Rolf. (2002/2003). Introduction - Union Disruption in Comparative Perspective: The Role of Assortative Partner Choice and Careers of Couples. *International journal of sociology : a journal of translations*, **32**(4), 3.
- Blossfeld, Hans-Peter, and Rohwer, Gotz. (1995). *Techniques of Event History Modeling. New Approaches to Causal Analysis*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Bonoli, Guiliano. (2005). The Politics of the New Social Policies: Providing Coverage against New Social Risks in Mature Welfare States. *Policy & Politics*, **33**(3), 431-449.
- Bouman, Anne Marthe. (2004). Financiële Gevolgen Van Echtscheiding Op De Lange Termijn. *Bevolkingstrends*, **52**(4), 85-89.
- Bouman, Anne Marthe. (2005). Arbeidsparticipatie Van Vrouwen Rond De Echtscheiding. *Bevolkingstrends*, **53**(1), 90-97.
- Bracher, Michael, Santow, Gigi, Morgan, S. Philip, and Trussell, James. (1993). Marriage Dissolution in Australia: Models and Explanations. *Population Studies*, **47**, 403-425.
- Bradbury, Katherine, and Katz, Jane. (2002). Women's Labor Market Involvement and Family Income Mobility When Marriages End. *New England Economic Review*, **2002**(4), 41-74.
- Bradshaw, Jonathan. (2006). *Child Support*. York: Joseph Rowntree Foundation; University of York.
- Bradshaw, Jonathan, and Finch, Naomi. (2002). *A Comparison of Child Benefit Packages in 22 Countries* (No. 174). Leeds: Department for Work and Pensions.
- Bradshaw, Jonathan, Kennedy, S., Kilkey, M., Hutton, S., Corden, A., Eardley, T., et al. (1996). *The Employment of Lone Parents: A Comparison of Policy in 20 Countries*. The family and parenthood: policy and practice. London: Family policy studies centre.
- Bradshaw, Jonathan, and Skinner, Christine. (2000). Child Support: The British Fiasco. *Focus*, **21**(1), 80-86.
- Bradshaw, Jonathan, Stimson, Carol, Skinner, Christine, and Williams, Julie. (1999). *Absent Fathers?* London; New York: Routledge.
- Brines, Julie, and Joyner, Kara. (1999). The Ties That Bind: Principles of Cohesion in Cohabitation and Marriage. *American Sociological Review*, **64**, 333-355.
- Britten, Nicky, and Heath, Anthony. (1983). Women, Men, and Social Class. In E. Gamarnikow, D. Morgan, J. Purvis & D. Taylorson (Eds.), *Gender, Class, and Work*. London: Heinemann.
- Brückner, Hannah, and Mayer, Karl Ulrich. (2005). De-Standardization of the Life Course: What It Might Mean? And If It Means Anything, Whether It Actually Took Place? In R. MacMillan (Ed.), *The Structure of the Life Course: Standardized? Individualized? Differentiated?*
- Brynin, Malcolm, and Schupp, Jürgen (2000). Education, Employment, and Gender Inequality Amongst Couples. *European Sociological Review*, **16**, 349.
- Bumpass, Larry, Sweet, James, and Martin, Teresa Castro. (1990). Changing Patterns of Remarriage. *Journal of Marriage and Family*, **52**(3), 747-756.
- Burkhauser, Richard V., Duncan, Greg J., Hauser, Richard, and Berntsen, Roland. (1991). Wife or Frau, Women Do Worse: A Comparison of Men and Women in the United States and Germany after Marital Dissolution. *Demography*, **28**(3), 353-360.
- Carlson, Marcia J., and Corcoran, Mary E. (2001). Family Structure and Children's Behavioral and Cognitive Outcomes. *Journal of Marriage and Family*, **63**(3), 779-792.
- Centraal Bureau voor de Statistiek. (2009). *Relatie En Gezin Aan Het Begin Van De 21ste Eeuw*. The Hague: CBS.
- Cherlin, Andrew. (1978). Remarriage as an Incomplete Institution. *American Journal of Sociology*, **84**(3), 634.
- Cherlin, Andrew. (1979). Work Life and Marital Dissolution. In G. Levinger & O. Moles (Eds.), *Divorce and Separation: Context, Causes, and Consequences*. New York: Basic Books.
- Cherlin, Andrew. (1992). *Marriage, Divorce, Remarriage*. Cambridge: Harvard University Press.
- Clearinghouse. (2004). Maternity and Parental Leaves: Clearinghouse on International Developments on Child, Youth and Family Policies at Columbia University.
- Cloin, M. (2010). *Het Werken Waard. Het Arbeidsaanbod van Laagopgeleide Vrouwen vanuit een Economisch en Sociologisch Perspectief*. Utrecht: Universiteit Utrecht. Dissertation.
- Corcoran, Mary. (1979). The Economic Consequences of Marital Dissolution for Women in the Middle Years. *Sex Roles*, **V5**(3), 343.
- Corden, Anne. (1999). *Making Child Maintenance Regimes Work*. London: Family Policy Studies Centre.
- Corden, Anne, and Meyer, Daniel R. (2000). Child Support Policy Regimes in the United States, United Kingdom, and Other Countries: Similar Issues, Different Approaches. *Focus*, **21**, 72-79.

- Covizzi, Ilaria. (2008). Does Union Dissolution Lead to Unemployment? A Longitudinal Study of Health and Risk of Unemployment for Women and Men Undergoing Separation. *European Sociological Review*, **24**, 347-361.
- Crompton, Rosemary. (2006). *Employment and the Family. The Reconfiguration of Work and Family Life in Contemporary Societies*. Cambridge: Cambridge University Press.
- Crouch, Colin. (1999). *Social Change in Western Europe*. Oxford: Oxford University Press.
- Cunningham, Mick. (2008). Influences of Gender Ideology and Housework Allocation on Women's Employment over the Life Course. *Social Science Research*, **37**(1), 254.
- De Graaf, Paul M., and Kalmijn, Matthijs. (2003). Alternative Routes in the Remarriage Market: Competing-Risk Analyses of Union Formation after Divorce. *Social forces*, **81**(4), 1459-1498.
- De Rose, Alessandra. (1992). Socio-Economic Factors and Family Size as Determinants of Marital Dissolution in Italy1. *European Sociological Review*, **8**, 71-91.
- Del Boca, Daniela. (1994). Post-Divorce Transfers and the Welfare of Mothers and Children in the United States. *Labour*, **8**(2), 259-277.
- Deven, Fred. (1999). *Reconciliation of Work and Family Life for Men and Women and the Quality of Care Services : Report on Existing Research in the European Union*. Luxembourg: Office for Official Publications of the European Communities.
- Dewilde, Caroline. (2002). The Financial Consequences of Relationship Dissolution for Women in Western Europe. In E. Ruspini & A. Dale (Eds.), *The Gender Dimension of Social Change. The Contribution of Dynamic Research to the Study of Women's Life Courses*. (pp. 81-110). Bristol: The Policy Press.
- Dewilde, Caroline. (2009). Divorce and Housing: A European Comparison of the Housing Consequences of Divorce for Men and Women', in H.-J. Andreß and D. Hummelsheim (eds) *When Marriage Ends. Economic and Social Consequences of Partnership Dissolution*, Cheltenham: Edward Elgar.
- Dewilde, Caroline, and Uunk, Wilfred. (2008). Remarriage as a Way to Overcome the Financial Consequences of Divorce. A Test of the Economic Need-Hypotheses for European Women. *European Sociological Review*, **24**, 393-407
- Duncan, Greg J., and Hoffman, Saul D. (1985). A Reconsideration of the Economic Consequences of Marital Dissolution. *Demography*, **22**, 485-497.
- Ebbinghaus, Bernhard. (2005). When Less Is More: Selection Problems in Large-N and Small-N Cross-National Comparisons. *International Sociology*, **20**(2), 133-152.
- Edin, Kathryn, and Lein, Laura. (1997). Work, Welfare, and Single Mothers' Economic Survival Strategies. *American Sociological Review*, **62**(2), 253.
- England, Paula. (2005). Gender Inequality in Labor Markets: The Role of Motherhood and Segregation. *Social Politics*, **12**(2), 264-288.
- Erikson, Robert, and Goldthorpe, John. H. (1993). *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford: Clarendon Press.
- Esping-Andersen, Gøsta. (1990). *The Three Worlds of Welfare Capitalism*. Cambridge: Polity Press.
- Esping-Andersen, Gøsta. (1999). *Social Foundations of Postindustrial Economies*. Oxford: Oxford University Press.
- Esping-Andersen, Gøsta. (2009). *The Incomplete Revolution: Adapting to Women's New Roles*. Cambridge: Polity Press.
- European Commission. (1992-1997). Missoc: Social Protection in the Member States of the European Union. Situation on 1 July 1991-1996 and Evolution: European Commission.
- European Commission. (1997). Missoc: Social Protection in the Member States of the European Union. Situation on 1 July 1996 and Evolution: European Commission.
- European Commission. (1998-2006). Missoc: Social Protection in the Member States of the European Union. Situation on 1 January 1998-2006 and Evolution. Retrieved 08.25.2008, from [http://ec.europa.eu/employment\\_social/social\\_protection/missoc\\_tables\\_en.htm](http://ec.europa.eu/employment_social/social_protection/missoc_tables_en.htm)
- European Commission. (2002). Missoc: Social Protection in the Member States of the European Union. Situation on 1 January 2002 and Evolution. from [http://ec.europa.eu/employment\\_social/social\\_protection/missoc\\_tables\\_en.htm](http://ec.europa.eu/employment_social/social_protection/missoc_tables_en.htm)
- European Values Survey / World Values Survey. (1990, 1999).
- Family policy database. (2003, version 2). LIS.
- Finch, Naomi. (2008). Family Policies in the UK. In I. Ostner & C. Schmitt (Eds.), *Family Policies in the Context of Family Change: The Nordic Countries in Comparative Perspective* Wiesbaden: VS-Verlag.
- Finnie, Ross. (1993). Women, Men, and the Economic Consequences of Divorce: Evidence from Canadian Longitudinal Data. *Canadian Review of Sociology and Anthropology*, **30**, 205-241.



- Fokkema, Tineke. (2001). Forse Inkomensdaling Voor Vrouwen Na Echtscheiding En Vroege Verweduwing: Bieden Hertrouw En Werk Uitkomst? *Bevolking en gezin* 5-30.
- Fu, Vincent Kang, Winship, Christopher, and Mare, Robert D. (2004). Sample Selection Bias Models. In M. Hardy & A. Bryman (Eds.), *Handbook of Data Analysis* (pp. 409-430). London: Sage Publications.
- Gähler, Michael, Hong, Ying, and Bernhardt, Eva. (2009). Parental Divorce and Union Disruption among Young Adults in Sweden. *Journal of family issues*, **30**(5), 688.
- Gallie, Duncan, and Paugam, Serge (Eds.). (2000). *Welfare Regimes and the Experience of Unemployment in Europe*. Oxford: Oxford University Press.
- Gelissen, John, and Arts, Wil. (2002). Three Worlds of Welfare Capitalism or More? A State-of-the-Art Report. *Journal of European Social Policy*, **12**, 137-158.
- Goldthorpe, John H. (1983). Women and Class Analysis: In Defence of the Conventional View. *Sociology*, **17**(4), 465-488.
- Goldthorpe, John H., and McKnight, Abigail. (2006). The Economic Basis of Social Class. In S. Morgan, D. Grusky & G. Fields (Eds.), *Mobility and Inequality: Frontiers of Research from Sociology and Economics*. Stanford: Stanford University Press.
- Goode, William J. (1966). Marital Satisfaction and Instability: A Cross-Cultural Class Analysis of Divorce Rates. In R. Bendix & S. Lipset (Eds.), *Class, Status, and Power* (pp. 377-387). London: Routledge.
- Goode, William J. (1993). *World Changes in Divorce Patterns*. New Haven, London: Yale University.
- Gornick, Janet, and Jacobs, Jerry. (1998). Gender, the Welfare State, and Public Employment: A Comparative Study of Seven Industrialized Countries. *American Sociological Review*, **63**(5), 688.
- Gornick, Janet, and Meyers, Marcia. (2003). *Families That Work. Policies for Reconciling Parenthood and Employment*. New York: Russell Sage Foundation.
- Gornick, Janet, Meyers, Marcia, and Ross, Katherin. (1997). Supporting the Employment of Mothers: Policy Variation across Fourteen Welfare States. *Journal of European Social Policy*, **7**(1), 45-70.
- Gornick, Janet, Meyers, Marcia, and Ross, Katherin. (1998). Public Policies and the Employment of Mothers: A Cross-National Study. *Social Science Quarterly*, **79**, 35-54.
- Gough, Ian, Bradshaw, Jonathan, Ditch, John, Eardley, Tony, and Whiteford, Peter. (1997). Social Assistance in Oecd Countries. *Journal of European Social Policy*, **7**(1), 17-43.
- Graham, John W., and Beller, Andrea H. (1989). The Effect of Child Support Payments on the Labor Supply of Female Family Heads. *The Journal of Human Resources*, **24**(4), 664-688.
- Gregg, Paul, Harkness, Susan, and Smith, Sarah. (2007). *Welfare Reform and Lone Parents in the Uk* (working paper No. 07/182). Bristol: Centre for Market and Public Organisation/ University of Bristol.
- Hakim, Catherine. (2000). *Work-Lifestyle Choices in the 21st Century: Preference Theory*. Oxford [etc.]: Oxford University Press.
- Härkönen, Juho, and Dronkers, Jaap. (2006). Stability and Change in the Educational Gradient of Divorce. A Comparison of Seventeen Countries. *European Sociological Review*, **22**, 501-517.
- Harris, Kathleen Mullan. (1993). Work and Welfare among Single Mothers in Poverty. *The American Journal of Sociology*, **99**(2), 317.
- Haurin, Donald R. (1989). Women's Labor Market Reactions to Family Disruptions. *The Review of Economics and Statistics*, **89**, 54-61.
- Headey, Bruce, and Muffels, Ruud. (2008). Do Generous Welfare States Generate Efficiency Gains Which Counterbalance Short Run Losses? Testing Downside Risk Theory with Economic Panel Data for the U.S., Germany and the Netherlands. *Social Indicators Research*, **86**(2), 337-354.
- Heckman, James J. (1979). Sample Selection Bias as a Specification Error. *Econometrica*, **47**(1), 153-161.
- Hicks, Alexander, and Kenworthy, Lane. (2003). Varieties of Welfare Capitalism. *Socio-economic Review*, **1**, 27-61.
- Hofferth, Sandra, Stanhope, Stephen, and Harris, Kathleen. (2005). Remaining Off Welfare in the 1990s: The Influence of Public Policy and Economic Conditions. *Social Science Research*, **34**(2), 426.
- Hoffman, Saul D. (1977). Marital Instability and the Economic Status of Women. *Demography*, **14**(1), 67-76.
- Holden, Karen, and Smock, Pamela. (1991). The Economic Costs of Marital Dissolution: Why Do Women Bear a Disproportionate Cost? *Annual Review of Sociology*, **17**, 51-78.

- Hook, Jennifer. (2010). Gender Inequality in the Welfare State: Sex Segregation in Housework, 1965–2003. *American Journal of Sociology*, **115**(5), 1480-1523.
- Jalovaara, Marika. (2003). The Joint Effects of Marriage Partners' Socioeconomic Positions on the Risk of Divorce. *Demography*, **40**, 67.
- Jansen, Mieke, Mortelmans, Dimitri, and Snoeckx, Laurent. (2009). Repartnering and (Re)Employment: Strategies to Cope with the Economic Consequences of Partnership Dissolution. *Journal of Marriage and Family*, **71**(5), 1271-1293.
- Jarvis, Sarah, and Jenkins, Stephen. (1999). Marital Splits and Income Changes: Evidence from the British Household Panel Survey. *Population Studies*, **53**(2), 237.
- Jenkins, Stephen. (2008). *Marital Splits and Income Changes over the Longer Term* (ISER Working Paper 2008 No. 7). Essex: Institute for Social and Economic Research.
- Johnson, William, and Skinner, Jonathan. (1986). Labor Supply and Marital Separation. *American Economic Review*, **76**, 455-469.
- Kalleberg, Arne, and Rosenfeld, Rachel. (1990). Work in the Family and in the Labor Market: A Cross-National, Reciprocal Analysis. *Journal of Marriage and the Family*, **52**(2), 331-346.
- Kalmijn, Matthijs. (2003). Country Differences in Sex-Role Attitudes: Cultural and Economic Explanations. . In W. Arts, J. Hagenaars & L. Halman (Eds.), *The Cultural Diversity of European Unity* (pp. 311-337). Leiden: Brill.
- Kalmijn, Matthijs. (2009). Country Differences in the Effects of Divorce on Well-Being: The Role of Norms, Support, and Selectivity. *European Sociological Review*, jcp035.
- Kalmijn, Matthijs, and Alessie, Rob. (2008). *Life Course Changes in Income: An Exploration of Age- and Stage Effects in a 15-Year Panel in the Netherlands*. Tilburg: Netspar.
- Kalmijn, Matthijs, De Graaf, Paul M. , and Poortman, Anne Rigt (2004). Interactions between Cultural and Economic Determinants of Divorce in the Netherlands. *Journal of Marriage and Family*, **66**(1), 75-89.
- Kalmijn, Matthijs, Loeve, Anneke, and Manting, Dorien. (2007). Income Dynamics in Couples and the Dissolution of Marriage and Cohabitation. *Demography*, **44**, 159-180.
- Kalmijn, Matthijs, and Saraceno, Chiara. (2008). A Comparative Perspective on Intergenerational Support. *European Societies*, **10**, 479-508.
- Kamerman, Sheila. (2000). Early Childhood Education and Care: An Overview of Developments in the Oecd Countries. *International Journal of Educational Research*, **33**(1), 7-29.
- Kitson, Gay C., Babri, Karen B., and Roach, Mary J. (1985). Who Divorces and Why: A Review. *Journal of Family Issues*, **6**(3), 255-293.
- Kitson, Gay C., and Morgan, Leslie A. (1990). The Multiple Consequences of Divorce: A Decade Review. *Journal of Marriage and the Family*, **52**(4, Family Research in the 1980s: The Decade in Review), 913-924.
- Koopmans, Ivy, and Schippers, Joop. (2003). Female Employment and Family Formation. The Institutional Context, *MoCho, FENICS, DynSoc and AGIR*. Brussels.
- Korpi, Walter. (2000). Faces of Inequality: Gender, Class, and Patterns of Inequalities in Different Types of Welfare States. *Social Politics*, **7**(2), 127-191.
- Lampard, Richard, and Peggs, Kay (1999). Repartnering: The Relevance of Parenthood and Gender to Cohabitation and Remarriage among the Formerly Married\*. *The British Journal of Sociology*, **50**(3), 443-465.
- Leibowitz, Arleen, Klerman, Jacob Alex, and Waite, Linda J. (1992). Employment of New Mothers and Childcare Choice: Differences by Children's Age. *The Journal of Human Resources*, **27**, 112-133.
- Levi, Margaret. (1990). A Logic of Institutional Change. In K. Schweers Cook & M. Levi (Eds.), *The Limits of Rationality*. (pp. 402-418). Chicago, London: The University of Chicago Press.
- Levy, Horacio, and Jenkins, Stephen. (2008). *Documentation for Derived Current and Annual Net Household Income Variables, BHPS Waves 1-16* (UK data archive study No. 3909): UK data archive.
- Lewis, Jane. (1992). Gender and the Development of Welfare Regimes. *Journal of European Social Policy*, **2**, 159-173.
- Liefbroer, Aart C., and Dourleijn, Edith. (2006). Unmarried Cohabitation and Union Stability: Testing the Role of Diffusion Using Data from 16 European Countries.
- Lillard, Lee A., Brien, Michael J., and Waite, Linda J. (1995). Premarital Cohabitation and Subsequent Marital Dissolution: A Matter of Self-Selection? *Demography*, **32**, 437-457.
- Löfström, Åsa (2009). *Gender Equality, Economic Growth, and Employment*. Stockholm: Department of Economics, Umeå University.

- Mandel, Hadas, and Semyonov, Moshe. (2005). Family Policies, Wage Structures, and Gender Gaps: Sources of Earnings Inequality in 20 Countries. *American Sociological Review*, **70**(6), 949.
- Mandel, Hadas, and Semyonov, Moshe. (2006). A Welfare State Paradox: State Interventions and Women's Employment Opportunities in 22 Countries. *American journal of sociology*, **111**, 1910-1949.
- Manting, Dorien, and Bouman, Anne Marthe. (2006). Short- and Long-Term Economic Consequences of the Dissolution of Marital and Consensual Unions. The Example of the Netherlands. *European Sociological Review*, **22**(4), 413-429.
- Manzoni, Anna, Vermunt, Jeroen K., Luijkx, Ruud, and Muffels, Ruud. (2010). Memory Bias in Retrospectively Collected Employment Careers: A Model Based Approach to Correct for Measurement Error. *submitted*.
- McKeever, Matthew, and Wolfinger, Nicholas H. (2001). Reexamining the Economic Costs of Marital Disruption for Women. *Social Science Quarterly*, **82**(1), 202-217.
- McLanahan, Sara, and Sandefur, Gary D. (1994). *Growing up with a Single Parent: What Hurts, What Helps*. Cambridge, Mass [etc.]: Harvard University Press.
- Meuleman, Bart, and Billiet, Jaak. (2009). A Monte Carlo Sample Size Study: How Many Countries Are Needed for Accurate Multilevel Sem?
- Moore, Sylvia. (1978). *The Short-Term Effects of Marital Disruption on the Labor Supply Behavior of Young Women*. The Ohio State University, Ohio.
- Mueller, Richard. (2005). The Effect of Marital Dissolution on the Labour Supply of Males and Females: Evidence from Canada. *Journal of Socio-Economics*, **34**, 787-809.
- North, Douglas. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- O'Connor, Julia. (1993). Gender, Class and Citizenship in the Comparative Analysis of Welfare State Regimes: Theoretical and Methodological Issues. *The British Journal of Sociology*, **44**(3), 501.
- O'Reilly, Jacqueline, and Fagan, Colette (Eds.). (1998). *Part-Time Prospects. An International Comparison of Part-Time Work in Europe, North America and the Pacific Rim*. London, New York: Routledge.
- OECD. (1990). *Employment Outlook 1990*. Paris: Organisation for Economic Cooperation and Development.
- OECD. (2001). Balancing Work and Family Life: Helping Parents into Paid Employment. In *Oecd Employment Outlook*. Paris: Organisation for Economic Cooperation and Development.
- OECD. (2005). *Employment Outlook 2005*. Paris: Organisation for Economic Cooperation and Development.
- OECD. (2006a). Oecd Family Database. Retrieved 05.11.2007, from [www.oecd.org/els/social/family/database](http://www.oecd.org/els/social/family/database)
- OECD. (2006b). Oecd Labour Force Statistics. Retrieved 05.11.2007, from <http://stats.oecd.org/wbos/default.aspx>
- Ono, Hiromi. (1998). Husbands' and Wives' Resources and Marital Dissolution. *Journal of Marriage and the Family*, **60**(3), 674-689.
- Oppenheimer, Valerie K. (1977). The Sociology of Women's Economic Role in the Family. *American Sociological Review*, **42**(3), 387-406.
- Oppenheimer, Valerie K. (1982). *Work and the Family: A Study in Social Demography*. New York: Academic Press.
- Oppenheimer, Valerie K. (1994). Women's Rising Employment and the Future of the Family in Industrial Societies. *Population and Development Review*, **20**(2), 293-342.
- Oppenheimer, Valerie K. (1997). Women's Employment and the Gain to Marriage: The Specialization and Trading Model. *Annual review of sociology*, **23**, 431.
- Oppenheimer, Valerie K. (2003). Cohabiting and Marriage During Young Men's Career-Development Process. *Demography*, **40**(1), 127-149.
- Orloff, Ann. (1993). Gender and the Social Rights of Citizenship: A Comparative Analysis of Gender Relations and Welfare States. *American Sociological Review*, **58**, 303-328.
- Pakulski, Jan, and Waters, Malcolm. (1996). The Reshaping and Dissolution of Social Class in Advanced Society. *Theory and Society*, **25**(5), 667.
- Parsons, Talcott. (1949). The Social Structure of the Family. In R. Anshen (Ed.), *The Family: It's Function and Destiny* (pp. 173-201). New York: Harper & Brothers Publishers.
- Peterson, Richard. (1989). *Women, Work, and Divorce* Albany: State University of New York Press.
- Pettit, Becky, and Hook, Jennifer. (2005). The Structure of Women's Employment in Comparative Perspective. *Social Forces*, **84**(2), 779-801.

- Pfau-Effinger, Birgit. (1998). Culture or Structure as Explanations for Differences in Part-Time Work in Germany, Finland, and the Netherlands? In J. O'Reilly & C. Fagan (Eds.), *Part-Time Prospects: An International Comparison of Part-Time Work in Europe, North America, and the Pacific Rim*. London, New York: Routledge.
- Pfau-Effinger, Birgit. (2005). Culture and Welfare State Policies: Reflections on a Complex Interrelation. *Journal of Social Policy*, **34**(1), 3-20.
- Poortman, Anne-Rigt. (2000). Sex Differences in the Economic Consequences of Separation: A Panel Study of the Netherlands. *European Sociological Review*, **16**, 367-383.
- Poortman, Anne-Rigt. (2002). *Socioeconomic Causes and Consequences of Divorce*. Universiteit Utrecht, Utrecht.
- Poortman, Anne-Rigt. (2005). Women's Work and Divorce: A Matter of Anticipation? A Research Note. *European Sociological Review*, **21**, 301-309.
- Poortman, Anne-Rigt, and Fokkema, Tineke. (2001). Economische Gevolgen Van Echtscheiding Voor Mannen En Vrouwen in Nederland, 1949-1998. *Sociale Wetenschappen*, **44**, 69-92.
- Poortman, Anne-Rigt, and Kalmijn, Matthijs. (2002). Women's Labour Market Position and Divorce in the Netherlands: Evaluating Economic Interpretations of the Work Effect. *European Journal of Population/Revue européenne de Démographie*, **18**, 175-202.
- Pronzato, C. (April 2007). British Household Panel Survey Consolidated Marital, Cohabitation and Fertility Histories, 1991-2005 [Computer File]. Colchester, Essex: UK Data Archive [distributor]: University of Essex. Institute for Social and Economic Research, [original data producer(s)].
- Rainwater, Lee, Rein, Martin, and Schwartz, Joseph E. (1986). *Income Packaging in the Welfare State: A Comparative Study of Family Income*. Oxford: Oxford University Press.
- Randall, Vicky. (2000). Childcare Policy in the European States: Limits to Convergence. *Journal of European Public Policy*, **7**(3), 346-368.
- Rogers, Stacy J. (2004). Dollars, Dependency, and Divorce: Four Perspectives on the Role of Wive's Income. *Journal of Marriage and Family*, **66**, 59-74.
- Rosenfeld, Rachel A., and Birkelund, Gunn Elisabeth. (1995). Women's Part-Time Employment: A Cross-National Comparison. *European Sociological Review*, **11**, 111-134.
- Rostgaard, Tine. (2004). *With Due Care: Social Care for the Young and the Old across Europe*.
- Rowlingson, Karen. (2001). The Social, Economic and Demographic Profile of Lone Parents. In J. Millar & K. Rowlingson (Eds.), *Lone Parents, Employment and Social Policy: Cross-National Comparisons* (pp. 169-188). Bristol: The Policy Press.
- Sainsbury, Diane. (1996). *Gender, Equality, and Welfare States*. Cambridge: Cambridge University Press.
- SaMIP/ Nelson, Kenneth. (2008). The Social Assistance and Minimum Income Protection Interim Data-Set, 2008, Version 1.3 Beta.
- Savage, Mike. (2000). *Class Analysis and Social Transformation*. Buckingham: Open University Press.
- Sayer, Liana C., and Bianchi, Suzanne M. (2000). Women's Economic Independence and the Probability of Divorce: A Review and Reexamination. *Journal of Family Issues*, **21**(7), 906-943.
- Schoen, Robert, Astone, Nan Marie, Rothert, Kendra, Standish, Nicola J., and Kim, Young J. (2002). Women's Employment, Marital Happiness, and Divorce. *Social Forces*, **81**(2), 643.
- Skinner, Christine, Bradshaw, Jonathan, and Davidson, Jacqueline. (2007). *Child Support Policy: An International Perspective* (Research Report No. 405). Leeds: Department for Work and Pensions.
- Smock, Pamela. (1993). The Economic Costs of Marital Disruption for Young Women over the Past Two Decades. *Demography*, **30**(3), 353.
- Smock, Pamela, Gupta, Sanjiv, and Manning, Wendy D. (1999). The Effect of Marriage and Divorce on Women's Economic Well-Being. *American Sociological Review*, **64**(6), 794-812.
- Snijders, Tom, and Bosker, Roel. (1999). *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling*. London: Sage Publications.
- Sociaal en Cultureel Planbureau. (2007). *Armoedemonitor 2007*. The Hague: SCP.
- Sørensen, Annemette. (1994). Women's Economic Risk and the Economic Position of Single Mothers. *European Sociological Review*, **10**, 173-188.
- Sørensen, Annemette, and McLanahan, Sara. (1987). Married Women's Economic Dependency, 1940-1980. *The American Journal of Sociology*, **93**(3), 659.
- South, Scott J. (2001). Time-Dependent Effects of Wives' Employment on Marital Dissolution. *American Sociological Review*, **66**(2), 226-245.

- Spruijt, Ed. (2007). *Scheidingskinderen. Overzicht Van Recent Sociaal-Wetenschappelijk Onderzoek Naar De Gevolgen Van Ouderlijke Scheiding Voor Kinderen En Jongeren*. Amsterdam: SWP.
- Stafford, Rebecca, Backman, Elaine, and Dibona, Pamela. (1977). The Division of Labor among Cohabiting and Married Couples. *Journal of Marriage and Family*, **39**(1), 43-57.
- Stanworth, Michelle. (1984). Women and Class Analysis: A Reply to John Goldthorpe. *Sociology*, **18**(2), 159-170.
- Stier, Haya, and Lewin-Epstein, Noah. (2000). Women's Part-Time Employment and Gender Inequality in the Family. *Journal of Family Issues*, **21**(3), 390-410.
- Stier, Haya, Lewin-Epstein, Noah, and Braun, Michael. (2001). Welfare Regimes, Family Supportive Policies, and Women's Employment Along the Life-Course. *American Journal of Sociology*, **106**, 1731-1760.
- Stier, Haya, and Mandel, Hadas. (2009). Inequality in the Family: The Institutional Aspects of Women's Earning Contribution. *Social Science Research*.
- Sweeney, Megan, M. (2002). Two Decades of Family Change: The Shifting Economic Foundations of Marriage. *American Sociological Review*, **67**(1), 132-47.
- Szelenyi, Szonja, and Olvera, Jacqueline. (1996). The Declining Significance of Class: Does Gender Complicate the Story? - Comments. *Theory and Society*, **25**(5), 725.
- Taylor-Gooby, Peter (2004). *New Risks, New Welfare: The Transformation of the European Welfare State*. Oxford: Oxford University Press.
- Tietze, Wolfgang, and Cryer, Debby. (1999). Current Trends in European Early Child Care and Education. *Annals of the American Academy of Political and Social Science*, **563**, 175-193.
- Tzeng, Jessie M., and Mare, Robert D. (1995). Labor Market and Socioeconomic Effects on Marital Stability. *Social Science Research*, **24**, 329-351.
- UNDP. (1995). *Human Development Report 1995*. New York: UNDP.
- UNICEF. (1999). *Women in Transition* (Regional Monitoring Reports No. 6). Florence: UNICEF International Child Development Centre.
- Uunk, Wilfred. (2004). The Economic Consequences of Divorce for Women in the European Union: The Impact of Welfare State Arrangements. *European Journal of Population*, **20**, 251-285.
- Uunk, Wilfred, Kalmijn, Matthijs, and Muffels, Ruud. (2005). The Impact of Young Children on Women's Labour Supply: A Reassessment of Institutional Effects in Europe. *Acta Sociologica*, **48**, 41-62.
- Van Damme, Maike, Kalmijn, Matthijs, and Uunk, Wilfred. (2009). The Employment of Separated Women in Europe: The Impact of Individual and Institutional Factors. *European Sociological Review*, **25**(2), 183-197.
- Van Damme, Maike, and Uunk, Wilfred (2009). Female-Supportive Policies and Women's Employment after Divorce. In H. J. Andress & D. Hummelsheim (Eds.), *When Marriage Ends: Economic and Social Consequences of Partnership Dissolution*. Cheltenham: Edward Elgar.
- Van Dijk, Liset. (2001). Macro Changes in Public Childcare Provision, Parental Leave, and Women's Employment: An International Comparison. In T. Van der Lippe & L. Van Dijk (Eds.), *Women's Employment in a Comparative Perspective* (pp. 37-58). New York: Aldine de Gruyter.
- van Drenth, Annemieke, Knijn, Trudie, and Lewis, Jane (1999). Sources of Income for Lone Mother Families: Policy Changes in Britain and the Netherlands and the Experiences of Divorced Women. *Journal of Social Policy* **28**(4), 619-641.
- Van Poppel, Frans. (1992). *Trouwen in Nederland. Een Historisch-Demografische Studie Van De 19e En Vroeg-20e Eeuw*. Wageningen: Landbouwniversiteit Wageningen.
- Vandecasteele, Leen. (2009). Poverty Trajectories after Risky Life Course Events in Different European Welfare Regimes. *European Societies*.
- Vandecasteele, Leen. (2010). Life Course Risks or Cumulative Disadvantage? The Structuring Effect of Social Stratification Determinants and Life Course Events on Poverty Transitions in Europe. *European Sociological Review*, (Advance Access published on March 11, 2010, DOI 10.1093/esr/jcq005).
- Verbakel, Ellen, and De Graaf, Paul M. (2009). Partner Effects on Labour Market Participation and Job Level: Opposing Mechanisms. *Work Employment Society*, **23**(4), 635-654.
- Vogel, Joachim (2003). The Family. *Social Indicators Research: special issue*, **64**(3), 393-435.
- Vogler, Carolyn, and Pahl, Jan. (1993). Social and Economic Change and the Organisation of Money within Marriage. *Work, Employment & Society*, **7**(1), 71-95.
- Vrooman, Cok. (2009). *Rules of Relief: Institutions of Social Security, and Their Impact*. the Hague: the Netherlands Institute for Social Research.

- Waite, Linda J., and Lillard, Lee A. (1991). Children and Marital Disruption. *The American Journal of Sociology*, **96**(4), 930-953.
- Weiss, Robert S. (1984). The Impact of Marital Dissolution on Income and Consumption in Single-Parent Households. *Journal of Marriage and the Family*, **46**(1), 115.
- White, Lynn K. (1990). Determinants of Divorce: A Review of Research in the Eighties. *Journal of Marriage and Family*, **52**(4), 904-912.
- Wolfinger, Nicholas H. (2005). *Understanding the Divorce Cycle: The Children of Divorce in Their Own Marriages*. Cambridge: Cambridge University Press.
- World Economic Forum. (2007). *The Global Gender Gap Report*. Geneva: World Economic Forum.
- Yamaguchi, Kazuo. (1991). *Event History Analysis*. Newsbury Park, CA [etc.]: Sage.

## Appendix

Table A.1.

Indicators of institutional support for separated women's employment in ISSM database (averages over years 1990, 1995, 2000, 2005)

	Child allowances	Single parent allowances	Child maintenance	Advanced child maintenance	Child care facilities	Parental leave	Share of part-time work	Informal income support	Living with parents	Informal child care	Female employment rate
Austria	285	553	428	129	4	102	23	13	50	68	74
Belgium	303	732	175	101	30	12	32	7	47	59	72
Czech Republic	78	555			2	121	6	14	58		81
Denmark	166	717	282	77	56	38	26	9	23	23	84
Estonia	38			0				19	48		83
Finland	220	728	331	75	29	151	13	11	20	50	84
France	125	619	397	55	25	117	24	10	37	32	77
Germany	211	797	387	130	7	102	33	8	34	66	74
Greece	40		0	0	4	0	11	20	66	92	61
Hungary	104	279			8	137	4	20	60		70
Ireland	117	592	0	0	10	0	29	9	67	70	61
Italy	164	592 <sup>a</sup>	0	0	6	21	23	7	80	90	59
Latvia	19			0	28			30	47		85
Lithuania	50			0	22	52		32	59		87
the Netherlands	230	819	285	0	11	0	56	10	18	100	70
Norway	185	705	275	63	31	35	36		36		81
Portugal	53	395	0	0	13	0	14	12	70	48	77
Slovenia	97							10	74		87
Spain	80	502	0	0	9	0	16	12	75	77	61
Sweden	190	720	182	89	37	60	22	7	32		87
Switzerland	278	850				0	44		40		75
United Kingdom	167	781	390	0	16	0	35	11	29	83	75
United States		759	651	0	27	0	25		32		75

(1) Child allowance: Legislative guaranteed monthly net allowance for families with two children, age 7 and 14 (including supplements) (in PPP). Source: Mutual Information System on Social Protection (MISSOC), European Commission (1992-1997, 1998-2006).

(2) Single parent allowance: Social Assistance standard rates for a lone parent with two children of age 7 and 14. Average monthly amounts expressed in PPP. Excluding housing costs, special needs benefit and occasional payments. Source: The Social Assistance and Minimum Income Protection Interim Data-Set, (2008), <http://www2.sofi.se/~kne/> (visited: 25. 08. 2008).

(3) Child maintenance: Formal child maintenance liabilities (amount that will be paid by fathers with 1.5 average income who want to divorce from mothers with average part-time income, having 2 children, 5/6 and 9 years old) (£ppp/month). Source 1995: Corden (1999, p. 34, Vignette B); US: Corden & Meyer (2000). Source 2005: Skinner, Bradshaw & Davidson (2007, p. 77, Vignette two).

(4) Guaranteed child maintenance: 1997: relative value of advance maintenance (£/month/child in PPP); 2005: amount of advance maintenance (£/month/child in PPP). Source 1997: Corden (1999, p. 45). Source 2005: Skinner, Bradshaw & Davidson (2007, p. 94-95) and own calculations based on interviews with national informants in Skinner et al. (2007).

(5) *Child care facilities (child 0-3 years): The number of available public child care places per 100 children under age three in publicly funded day care services. Sources: 1990, 1995: Tietze & Cryer (1999); HU, NO1990: Van Dijk (2001); AT, FI, SE: Randall (2000); LV, LT: UNICEF(1999); NO1995: Deven (1999); US1995: OECD (2001). Source 2000: OECD (2001); FR, IE, IT: OECD Family database (2006); US: (2000).Source 2005: OECD family database (2006).*

(6) *Parental leave: Number of fully paid weeks of parental/child care leave for mother with 2 children (excluding leave to care for sick child). Source 1990: Tietze & Cryer (1999); NO, US: OECD employment outlook (1990). Source 1995: Kamerman (2000). Source 2000: Family Policy Database (2003, version 2); AT, CZ, GR, HU, IE, IT, LT, PT, ES: The Clearinghouse on International Developments on Child, Youth and Family Policies (2004). Source 2005: OECD family database (2006).*

(7) *Share of part-time work: Incidence of female part-time work (less than 30 hours), percentage of fulltime work. Source: OECD: <http://stats.oecd.org/wbos/default.aspx> (visited: 25. 08. 2008).*

(8) *Informal income support: Regular help received in the form of either money or food from a person not living in the household in the past year. Source: European Quality of Life Survey (2003).*

(9) *Living with parents: Percentage of unmarried adults (aged 18-50) who live with their parents. Source: European Values Survey/ World Values Survey(1990, 1999).*

(10) *Informal child care: Index of intensity in informal care. Bettio & Plantenga (2004).*

(11) *Female employment rate: Age standardized female employment rate. Source: International Labour Organization: <http://kilm.ilo.org/KILMnetBeta/default2.asp> (visited: 29.04. 2010).*

<sup>a</sup> Amount is considered to be the same as in Ireland (as in the MISSOC database the monthly amounts of both countries are more or less the same).

Source: Institutional Support for Single Mothers(ISSM) database (23 industrialized countries; average over years 1990, 1995, 2000, 2005)